**RESOURCE AND PATIENT MANAGEMENT SYSTEM**

# Laboratory (LR)
# Electronic Signature Enhancement

## User's Guide

**Version 5.2, Patch 13**
**September 2002**

**Information Technology Support Center**
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# PREFACE

This document describes how to utilize the RPMS Lab Electronic Signature modification, and describes the new functionality that the RPMS system gains with the RPMS Lab Electronic Signature modification.

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# 1.0　Release Notes

## 1.1　Overview

The RPMS Lab Electronic Signature modification, Version 5.2, Patch 13 provides the capability of facilitating and tracking review of laboratory results by physicians.

## 1.2　New Functionality

Currently, there is no process/methodology in place for alerting physicians when lab results are ready for their review in the IHS RPMS Lab Module. The primary objectives of this project are to provide this alert capability, an easy method of reviewing the lab results, and tracking and auditing of signed lab results.

The events that trigger a lab result to be reviewed and signed by the RPMS Lab Electronic Signature modification are as follows:

- Verified Results entered
- Verified Results edited

# 2.0    Defining Participating Physicians

## 2.1    Overview

Participating Physicians are those physicians at a service unit who elect to use the RPMS Lab Electronic Signature enhancement software.  Each participating physician must be defined in the Participating Physician file by way of the menu option 'Enter/Edit/Re-Activate Lab ESIG Physicians'.  The alert message process and the trigger events will check to see if a physician is defined as a participating physician before creating the 'to be notified and reviewed' cross-reference.

## 2.2    Entering/Editing/Re-Activating Supervisors

Supervisors are physicians who may have ultimate responsibility for other physicians.  A supervisor has the ability to perform any of the new functions for any of their subordinate physicians.  This ability will help the supervisor ensure that no lab result will 'fall through the cracks'.  The supervisor will also have the capability of reviewing delinquent lab results for their subordinate physicians.  If the physician is defined as a Supervisor in the *PHYSICIAN TYPE field, then the **PHYSICIAN'S SUPERVISOR field will default to themselves.

```
Select Option: Enter/Edit/Re-activate Lab ESIG Physicians **NEW**
Enter/Edit/Re-activate Lab ESIG Physicians **NEW**
Select PARTICIPATING PHYSICIAN: JA
    1    JAMES,SHERRYL
    2    JAK  KITZES,JUDITH
CHOOSE 1-2: 1  JAMES,SHERRYL
  Are you adding 'JAMES,SHERRYL' as
    a new BLRA LAB PHYSICIANS (the 4TH)? No// Y  (Yes)
PHYSICIAN TYPE: S  Supervisor   <*>
PHYSICIAN'S SUPERVISOR: JAMES,SHERRYL//   <**>
NORMAL RESULTS REVIEW DAYS: 1
ABNORMAL RESULTS REVIEW DAYS: 1
CRITICAL RESULTS REVIEW DAYS: 1
INACTIVE FLAG: ACTIVE  <This will automatically default to ACTIVE>
Select SURROGATE PHYSICIANS:
```

The supervisor can define the length of time before a lab result will show up on the Delinquent Result Report by defining a set number of days.  The minimum value is 1 day and the maximum value is 14 days.

- Critical Results Review Days— this is the number of days from the lab entry verification date in which a lab result containing any critical value (Critical Low or Critical High) should have been reviewed and signed by the responsible physician.  If the lab results have not been reviewed and signed within this defined number of days, then it becomes a delinquent lab result

and will appear on the Delinquent Lab Results Report.  See Chapter for an example.

- Abnormal Results Review Days— this is the number of days from the lab entry verification date in which a lab result containing any abnormal value (Low or High) should have been reviewed and signed by the responsible physician.  If the lab results have not been reviewed and signed within this defined number of days, then it becomes a delinquent lab result and will appear on the Delinquent Lab Results Report.  See Chapter for an example.

- Normal Results Review Days— this is the number of days from the lab entry verification date in which a lab result containing all normal values should have been reviewed and signed by the responsible physician.  If the lab results have not been reviewed and signed within this defined number of days, then it becomes a delinquent lab result and will appear on the Delinquent Lab Results Report.  See Chapter for an example.

In addition supervisors may also wish to set up surrogates for themselves.  See Section 2.8 for more information about setting up surrogates.

## 2.3    Inactivating Supervisors

The following shows how to inactivate participating supervisory physicians using the menu option – Inactivate Lab ESIG Physicians **NEW**:

```
Select Option: Inactivate Lab ESIG Physicians **NEW**
Inactivate Lab ESIG Physicians **NEW**


Select PARTICIPATING PHYSICIAN:    JAMES,SHERRYL

This physician is a designated supervisor.  All subordinate
participating physicians must have a valid supervisor.
DO YOU WISH TO REASSIGN TO ANOTHER SUPERVISOR NOW? YES
Select PARTICIPATING PHYSICIAN: MITRETEK,PROGRAMMER

To inactive physician JAMES,SHERRYL enter "I"
INACTIVE FLAG: ACTIVE// I   INACTIVE
Select a SURROGATE PHYSICIAN:MITRETEK,PROGRAMMER
  Are you adding 'MITRETEK,PROGRAMMER' as
    a new SURROGATE PHYSICIANS (the 1ST for this BLRA LAB PHYSICIANS)? No// Y
  (Yes)
START DATE: T  (MAY 16, 2002) <This is a required field and you will not be
allowed to bypass>
END DATE: Aug 14, 2002  <This field will automatically default to 90days after
start date>
```

## 2.4     Re-Activating Supervisors

Below shows how to re-activate a supervisory participating physician:

```
Select Option: Enter/Edit/Re-activate Lab ESIG Physicians **NEW**
Enter/Edit/Re-activate Lab ESIG Physicians **NEW**

Select PARTICIPATING PHYSICIAN: JAMES,SHERRYL
        ...OK? Yes//Y    (Yes)
PHYSICIAN TYPE: Supervisor//
PHYSICIAN'S SUPERVISOR: MITRETEK,PROGRAMMER// JAMES,SHERRYL  <Reset to self as
supervisor>
NORMAL RESULTS REVIEW DAYS: 1// <May want to change these settings if
physician wants>
ABNORMAL RESULTS REVIEW DAYS: 1//
CRITICAL RESULTS REVIEW DAYS: 1//
INACTIVE FLAG: ACTIVE  <Using this option and entering through the fields will
automatically activate the selected inactive physician>
Select SURROGATE PHYSICIANS: MITRETEK,PROGRAMMER//
  SURROGATE PHYSICIANS: MITRETEK,PROGRAMMER//
  START DATE: MAY 16,2002//
  END DATE: AUG 14,2002// T  (MAY 16, 2002) <May want to end date the
surrogate>
Select SURROGATE PHYSICIANS:
```

## 2.5 Entering/Editing Non-Supervisors

Non-supervisor physicians are those physicians who will not have responsibility for other physicians. Each non-supervisor physician must have a supervisor defined in the PHYSICIAN"S SUPERVISOR field.

```
Select Option: ENTER/Edit/Re-Activate Participating Lab Physicians **NEW**
Select PARTICIPATING PHYSICIAN: JONES,ED            EJ      119      PHYSICIAN
  Are you adding 'JONES,ED' as a new BLRA LAB PHYSICIANS (the 21ST)? No// Y
(Yes)

PHYSICIAN TYPE: <Return>  (for non-supervisory physicians, this may be blank)
PHYSICIAN'S SUPERVISOR: CLARK,JOE R <Return>
```

> **WARNING**: You will NOT be able to exit out without entering a PHYSICIAN'S SUPERVISOR for a non-supervisor participating physician. Be sure that a supervisor has been entered first!

```
Select PARTICIPATING PHYSICIAN: CHAPLIN,JANE          JC
  Are you adding 'CHARLIE,JENNA' as
    a new BLRA LAB PHYSICIANS (the 21ST)? No// Y  (Yes)
PHYSICIAN TYPE:
PHYSICIAN'S SUPERVISOR: <Return>  ??
     Select this physician's supervisor
     Only select designated supervisor physicians
PHYSICIAN'S SUPERVISOR: ^
   EXIT NOT ALLOWED ??
PHYSICIAN'S SUPERVISOR: ^//
```

## 2.6       Inactivating Non-Supervisors

When a non-supervisor is inactivated from the participating physician file, a surrogate is required to be designated for a default period of 90 days after start of inactivation. This is to prevent any outstanding lab accessions from being missed.

In addition, this option can be used when a physician leaves the facility.  All their outstanding lab results reassigned to another participating physician through the 'Inactivate a Participating Physician' option.

```
Select Option: Inactivate Lab ESIG Physicians **NEW**
Inactivate Lab ESIG Physicians **NEW**


Select PARTICIPATING PHYSICIAN: AOKI,ELLEN
        ...OK? Yes//   (Yes)

To inactive physician AOKI,ELLEN enter "I"
INACTIVE FLAG: ACTIVE// I  INACTIVE
Select a SURROGATE PHYSICIAN:MITRETEK,PROGRAMMER  <Must designate a surrogate>
        ...OK? Yes//   (Yes)

START DATE: MAY 15,2002// T  (MAY 16, 2002)
END DATE: Aug 14, 2002  <This will automatically default to 90 days after
START DATE>
```

## 2.7       Re-Activating Participating Physicians

The following steps show how to re-activate a inactive physician:

```
Select Option: ENTER/Edit/Re-Activate Participating Lab Physicians **NEW**


Select PARTICIPATING PHYSICIAN: AOKI,ELLEN
        ...OK? Yes//   (Yes)

PHYSICIAN TYPE:
PHYSICIAN'S SUPERVISOR: MITRETEK,PROGRAMMER//
INACTIVE FLAG: ACTIVE  <Using this option will automatically activate the
physician>
Select SURROGATE PHYSICIANS: MITRETEK,PROGRAMMER//
  SURROGATE PHYSICIANS: MITRETEK,PROGRAMMER//
  START DATE: MAY 16,2002//
  END DATE: AUG 14,2002// T  (MAY 16, 2002) <May want to end date the
surrogate>
Select SURROGATE PHYSICIANS:
```

## 2.8       Surrogates

Defining surrogates allows a certain amount of flexibility in the review process.  If one physician is temporarily unable to review lab results, an alternate physician may be given the ability to sign off on labs for the unavailable physician.  The supervisor

can also do this automatically for their subordinate physicians (i.e. The subordinate physician will have the supervisor defined in their PHYSICIAN'S SUPERVISOR field.).

A physician may allow another physician to review and sign their lab results by entering a specified START DATE and END DATE.  Entering a specified date range means that this assigned surrogate will be able to see and sign for the unavailable physician's lab results only during that date range.  After the end of the date range, they will no longer see the other physician's lab results on their list.

```
Select SURROGATE PHYSICIANS: SMITH,SAM          SST
  Are you adding 'SMITH,SAM' as a new SURROGATE PHYSICIANS (the 2ND for this
BLRA LAB PHYSICIANS)? No// Y  (Yes)
  START DATE: T  (JUN 28, 2001) <Each of these date fields are required for
designating a surrogate>
  END DATE: T+7  (JUL 05, 2001)
Select SURROGATE PHYSICIANS:
```

The START and END dates define the date range of when the physician is the surrogate.  In the example above, Sam Smith will be the surrogate reviewer during the date interval of June 28, 2001 – July 5, 2001.  Sam Smith will not be able to review labs as a surrogate after July 5, 2001.

The date range has NO correlation to the date of when a lab is ordered or when the specimen is collected.  The date range is ONLY the time frame in which the surrogate is able to review the other physician's lab result queue.

# 3.0    Triggers / Event Points

## 3.1    Overview

Triggers / Event Points have been inserted into RPMS Lab Module code to create a cross-reference when a lab result is verified.  The events that trigger a Lab Electronic Signature event are as follows:

## 3.2    Trigger / Event Points Utilized by the BLRA Modification

The following charts show all the RPMS options that will trigger a cross-reference in the RPMS Lab Module, if the ordering physician is a participating physician.

### 3.2.1    General Laboratory

| RPMS Menu Option Description |
| --- |
| Enter/verify data (auto instrument) |
| Enter/verify data (Load list) |
| Enter/verify/modify data (manual) |
| Enter/verify data (Work list) |
| Group verify (EA, EL, EW) |
| Group data review (verified & EM) |
| Fast Bypass Data Entry/Verify |
| Bypass Data Entry/Verify |

### 3.2.2    Microbiology

| RPMS Menu Option Description |
| --- |
| Results entry (batch) |
| Results entry |
| Verification by supervisor |

### 3.2.3    Modifying Accessions

| RPMS Menu Option Description |
| --- |
| Add tests to a given accession |
| Delete test from an accession |

## 3.3    Example Triggered Event

A new physician was set up in the system as a participating physician (see Chapter 2.0 of this manual).  This new physician is Adam ADAM.  Signing onto the Review option shows his review list with no lab results to review.

```
LAB RESULTS LIST              May 21, 2002 16:12:07      Page:    0 of    0
*** MAIN SCREEN ***

WARNING: RESTRICTED GOVERNMENT DATA, UNAUTHORIZED ENTRY/USE IS A FEDERAL CRIME

----ACC#---------PATIENT---------COLLECT DATE--PROVIDER-----STATUS---COMPLETE-










----------No Lab Results to Review at this time-------------------------------
R  Review Lab Result                   P  Patient Sort Display
C  Subordinate Provider Results        Q  Quit
Select Option:Quit//
```

Once new lab results are entered into the Lab Package that were ordered by Adam Adam, the results will appear in the "Review/Sign Lab Results" box.

Shown below is the verified lab result in the 'Review/Sign Lab Results' list for Adam ADAM:

```
LAB RESULTS LIST              May 21, 2002 16:15:28      Page:    1 of    1
*** MAIN SCREEN ***

WARNING: RESTRICTED GOVERNMENT DATA, UNAUTHORIZED ENTRY/USE IS A FEDERAL CRIME

----ACC#---------PATIENT---------COLLECT DATE--PROVIDER-----STATUS---COMPLETE-
1   HE 0521 1       HUDGAS,SHAWN AL 5/21/02@16:14 ADAM,ADAM    CRIT     YES







----------Enter ?? for more actions------------------------------------------
R  Review Lab Result                   P  Patient Sort Display
C  Subordinate Provider Results        Q  Quit
Select Option:Quit//
```
*Figure 3-1: Completed result*

# 4.0    Viewing Lab Results

## 4.1    Overview

Information from data entry through the specific Lab options will trigger a record for a participating physician.  If a physician is not participating, a record will not be triggered.  A lab result will remain on a participating physician's review list until it is signed.

## 4.2    Lab Result Alerts

An alert message will display when signing the primary menu option as a participating physician.

```
ACCESS CODE:
VERIFY CODE:

Good morning SMITH,SAM
     You last signed on Jun 28,2001 at 16:51
Site set to PARKER HOSP


    You have 6 Lab Results to Review
         with 5 ABNORMALs

  APC    Ambulatory Patient Care ...
  AQAQ   CREDENTIALS Tracking System ...
  CHS    Contract Health System ...
  LAB    Laboratory DHCP Menu ...
  NUT    Nutrition and Dietetics Menu ...
  PAT    Patient registration ...
  PCC    Patient Care Component ...
  PDU    Package Documentation Utilities ...
  QAUR   QA/UR System ...
  T&A    Time and Attendance Menu ...

Select RPMS Applications Option:
```

The message will be different depending on the types of lab results there are to review for the participating physician.  Critical and abnormal results are separated out in the alert message.

```
    You have 13 Lab Results to Review
         with 1 CRITICAL and with 6 ABNORMALs
```

If there are only normal results to review, the alert message will appear as below:

```
    You have 5 Lab Results to Review
```

The participating physician will have the 'Review/Sign Lab Results **NEW**' option and will be required to review and sign any lab results that were included in the alert message at the time of sign on.

## 4.3     Display of Lab Results

### 4.3.1     Accessing the Review List

When a physician selects the 'Review/Sign Lab Results **NEW**' option, it will check to see if that physician is a participating physician in the Electronic Signature Lab enhancement participating physicians file.

```
Select Laboratory DHCP Menu Option: SIG  Lab E-SIG Menu


   DEL    Delinquent Lab Results **NEW**
   EDT    Enter/Edit Participating Lab Physicians **NEW**
   REV    Review/Sign Lab Results **NEW**
   SGN    Signed Lab Results Report **NEW**

Select Lab E-SIG Menu Option: REV  Review/Sign Lab Results **NEW**

YOU ARE NOT SET UP AS A PARTICIPATING PHYSICIAN YET.  PLEASE TRY LATER.
```

### 4.3.2     Electronic Signature

When a participating physician selects the 'Review/Sign Lab Results **NEW**' option, they will be prompted to enter their electronic signature code.  This verification of the physician's electronic signature is valid until they exit from the option.

If a physician currently does not have an electronic signature defined, they will get the message 'No Electronic Signature code to check'. An electronic signature may be enter by selecting the 'User's Toolbox' option and the 'Electronic Signature code Edit' option.

```
Select Laboratory DHCP Menu Option: SIG  Lab E-SIG Menu


   DEL    Delinquent Lab Results **NEW**
   EDT    Enter/Edit Participating Lab Physicians **NEW**
   REV    Review/Sign Lab Results **NEW**
   SGN    Signed Lab Results Report **NEW**

Select Lab E-SIG Menu Option: REV  Review/Sign Lab Results **NEW**
```

```
You will have 60 seconds before timeout to enter your electronic signature for
verification!!
No Electronic Signature code to check.


Select Lab E-SIG Menu Option: TBOX  User's Toolbox


          Display User Characteristics
          Edit User Characteristics
          Electronic Signature code Edit
          Menu Templates ...
          Spooler Menu ...
          Switch UCI
          TaskMan User
          User Help

Select User's Toolbox Option: ELECTRonic Signature code Edit
This option is designed to permit you to enter or change your Initials,
Signature Block Information, Office Phone number, and Voice and
Digital Pagers numbers.
In addition, you are permitted to enter a new Electronic Signature Code
or to change an existing code.


INITIAL: BJM//
SIGNATURE BLOCK PRINTED NAME: BETTY J MEDUSA//
SIGNATURE BLOCK TITLE:
OFFICE PHONE:
VOICE PAGER:
DIGITAL PAGER:

Your typing will not show.
ENTER NEW SIGNATURE CODE:  {enter a unique code for your electronic signature}
RE-ENTER SIGNATURE CODE FOR VERIFICATION: {you must enter it again to confirm}
DONE


          Display User Characteristics
          Edit User Characteristics
          Electronic Signature code Edit
          Menu Templates ...
          Spooler Menu ...
          Switch UCI
          TaskMan User
          User Help

Select User's Toolbox Option:
```

If a physician's electronic signature is over 90 days old a message will alert the physician to change their electronic signature.

```
Select Laboratory DHCP Menu Option: SIG  Lab E-SIG Menu


   DEL     Delinquent Lab Results **NEW**
   EDT     Enter/Edit Participating Lab Physicians **NEW**
   REV     Review/Sign Lab Results **NEW**
   SGN     Signed Lab Results Report **NEW**

Select Lab E-SIG Menu Option: REV  Review/Sign Lab Results **NEW**

You will have 60 seconds before timeout to enter your electronic signature for
verification!!

Enter your Current Signature Code:    SIGNATURE VERIFIED

Your Electronic Signature Code has expired, you need to create a new one.

Your typing will not show.
ENTER NEW SIGNATURE CODE:
RE-ENTER SIGNATURE CODE FOR VERIFICATION:
```

Physicians will be given three attempts to sign on to the menu option.  If a physician cannot recall their electronic signature code by the three attempts, they must ask the system manager to clear out the electronic signature code and then a new one must be entered through the option 'Electronic Signature Code Edit' in the User's Toolbox.

```
Select Laboratory DHCP Menu Option: SIG  Lab E-SIG Menu


   DEL     Delinquent Lab Results **NEW**
   EDT     Enter/Edit Participating Lab Physicians **NEW**
   REV     Review/Sign Lab Results **NEW**
   SGN     Signed Lab Results Report **NEW**

Select Lab E-SIG Menu Option: REV  Review/Sign Lab Results **NEW*

You will have 60 seconds before timeout to enter your electronic signature for
verification!!

Enter your Current Signature Code:   ??

Enter your Current Signature Code:   ??

Enter your Current Signature Code:   ??
```

The electronic signature will only need to be entered once, upon entry to the option 'Review/Sign Lab Results'.  However, if a physician signs off or exits to another menu the electronic signature must be re-entered upon the next entry into 'Review/Sign Lab Results'.

```
Select Laboratory DHCP Menu Option: SIG  Lab E-SIG Menu


   DEL    Delinquent Lab Results **NEW**
   EDT    Enter/Edit Participating Lab Physicians **NEW**
   REV    Review/Sign Lab Results **NEW**
   SGN    Signed Lab Results Report **NEW**


Select Lab E-SIG Menu Option: REV  Review/Sign Lab Results **NEW*

You will have 60 seconds before timeout to enter your electronic signature for
verification!!

Enter your Current Signature Code:    SIGNATURE VERIFIED
```

Once the electronic signature is entered and verified, the Review List will display.

### 4.3.3    Review List

A participating physician will see the lab results on 'Review/Sign Lab Results' list which they are responsible for as well as any lab results in which they have been assigned to review and sign as a temporary surrogate.  The order of the list is as follows, the oldest lab results containing any critical value, i.e. Critical Low or Critical High flagged results, then the oldest lab results containing any abnormal value; i.e. Low or High flagged results, then the oldest lab results containing any values without reference ranges (N/A), and then results containing only normal values (referred to as normal results).  Pending results come after the complete results within their category of CRIT, ABN, N/A, and NOR.

```
LAB RESULTS LIST                May 16, 2002 14:21:27        Page:    1 of    1
*** MAIN SCREEN ***

WARNING: RESTRICTED GOVERNMENT DATA, UNAUTHORIZED ENTRY/USE IS A FEDERAL CRIME

---ACC#----------PATIENT--------COLLECT DATE--PROVIDER-----STATUS---COMPLETE-
1  HE 0503 3    HAETLAI,MARVIN  5/3/02@14:57: MITRETEK,PRO CRIT      YES
2  HE 0503 5    KAALAR,BIANCA   5/3/02@14:59: MITRETEK,PRO CRIT      YES
3  HE 0516 3    KAALAR,JERICO M 5/16/02@14:18 MITRETEK,PRO CRIT      YES
4  HE 0516 4    WEBNOM,CLIFTON  5/16/02@14:21 MITRETEK,PRO CRIT      PEND
5  HE 0503 2    JABBENAME,SUNSH 5/3/02@14:54: MITRETEK,PRO ABN       YES
6  CH 0507 1    KAALAR,BIANCA   5/7/02@11:14: MITRETEK,PRO ABN       YES
7  CH 0507 2    GATOR,ALLI      5/7/02@13:58: MITRETEK,PRO N/A       YES
8  HE 0507 1    GUMAZ,ALETHA JO 5/7/02@14:01: MITRETEK,PRO NOR       YES
9  UA 0510 1    HALLAR,BROOKLYN 5/10/02@17:07 MITRETEK,PRO NOR       YES




----------Enter ?? for more actions------------------------------------------
R  Review Lab Result                P  Patient Sort Display
C  Subordinate Provider Results     Q  Quit
Select Option:Quit//
```

*Figure 4-1: Lab Results List for Participating Physician who is NOT a surrogate for any other physicians*

Betty MEDUSA designates ED JONES as her surrogate below.  When Ed Jones signs on to review his lab results, he will also be able to review and sign Betty Medusa's lab results as well.

```
Select User's Toolbox Option:  Enter/Edit/Re-Activate Participating Lab
Physicians **NEW**
Select SURROGATE PHYSICIANS: JONES,ED//

  START DATE: JUL 10,2001//
  END DATE: JUL 30,2001//
Select SURROGATE PHYSICIANS:
```

Shown below is what Ed Jones sees in his 'Review/Sign Lab Results' list after Betty has designated Ed Jones as her surrogate.
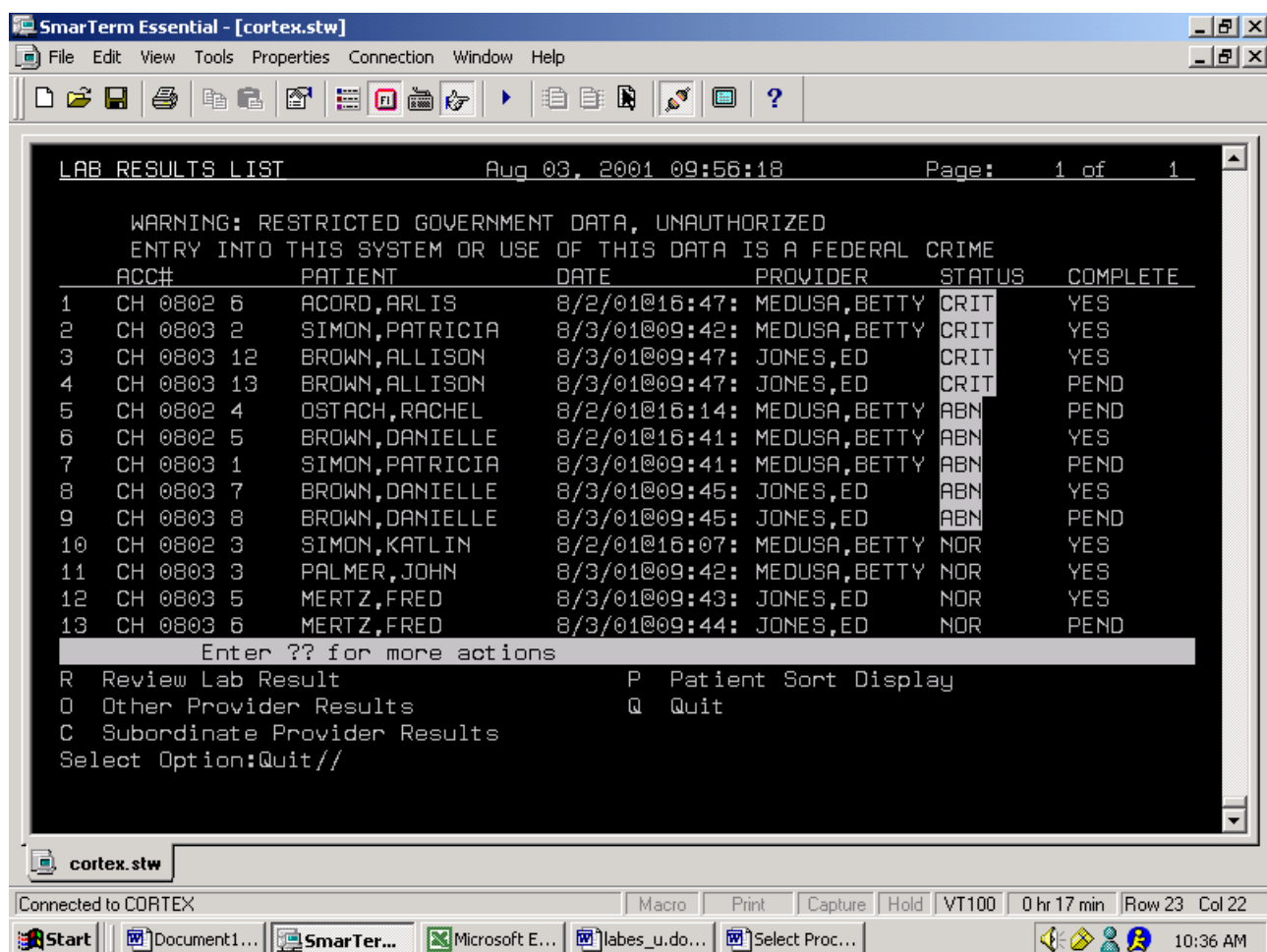


*Figure 4-2: Participating Physician who is a surrogate*

### 4.3.4    Patient Sort Display

The Patient Sort Display will reorder the Review List to group patients together alphabetically before sorting by critical, abnormal, no references (N/A), and normal by oldest date.
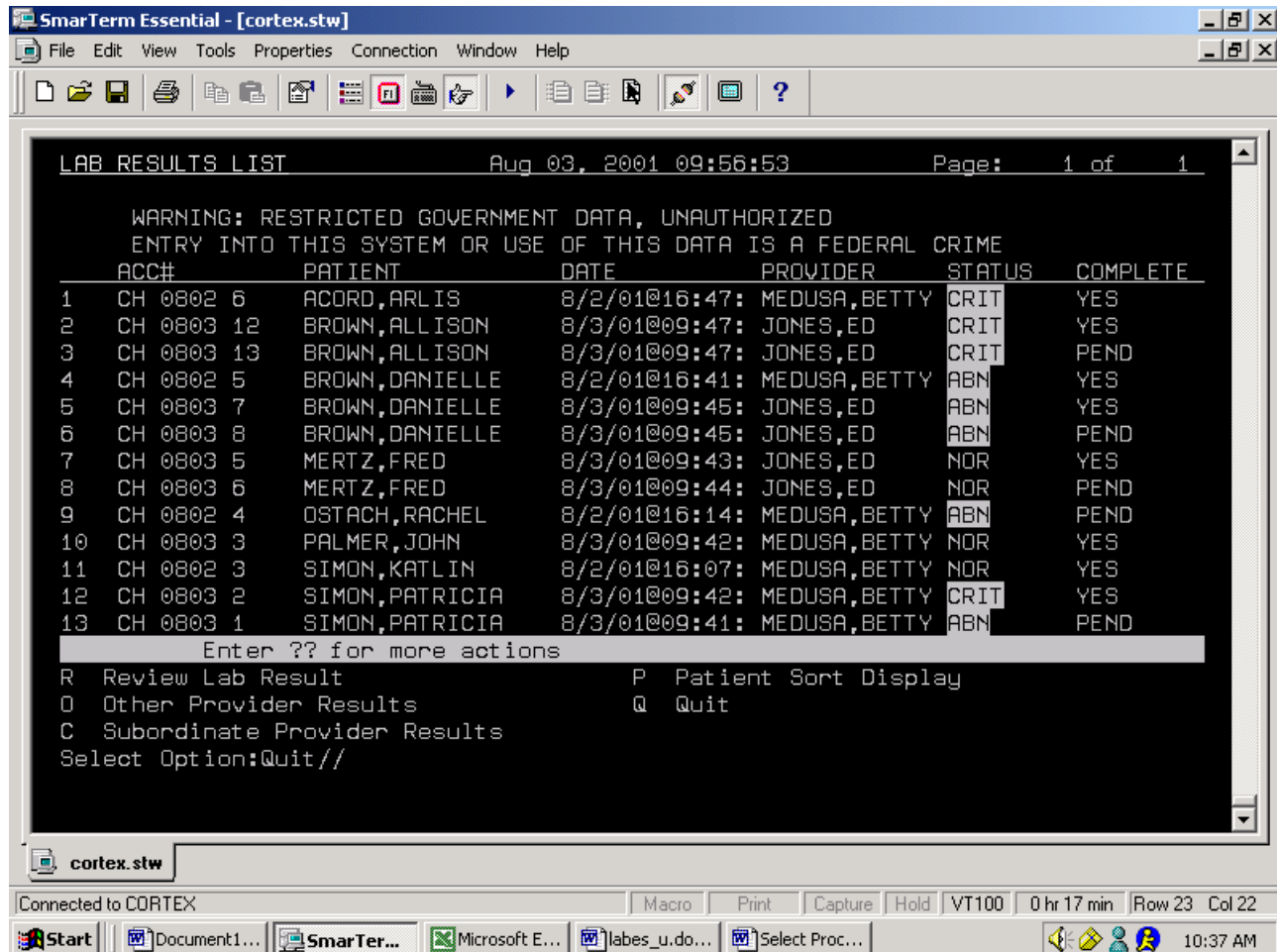


*Figure 4-3: Patient Sort Display*

### 4.3.5    Check Subordinate Providers

Participating supervisory physicians who have assigned subordinate participating physicians will be able to review and sign all the subordinate physicians' results through this option 'Check Subordinate Providers' from their 'Review/Sign Lab Results' list.
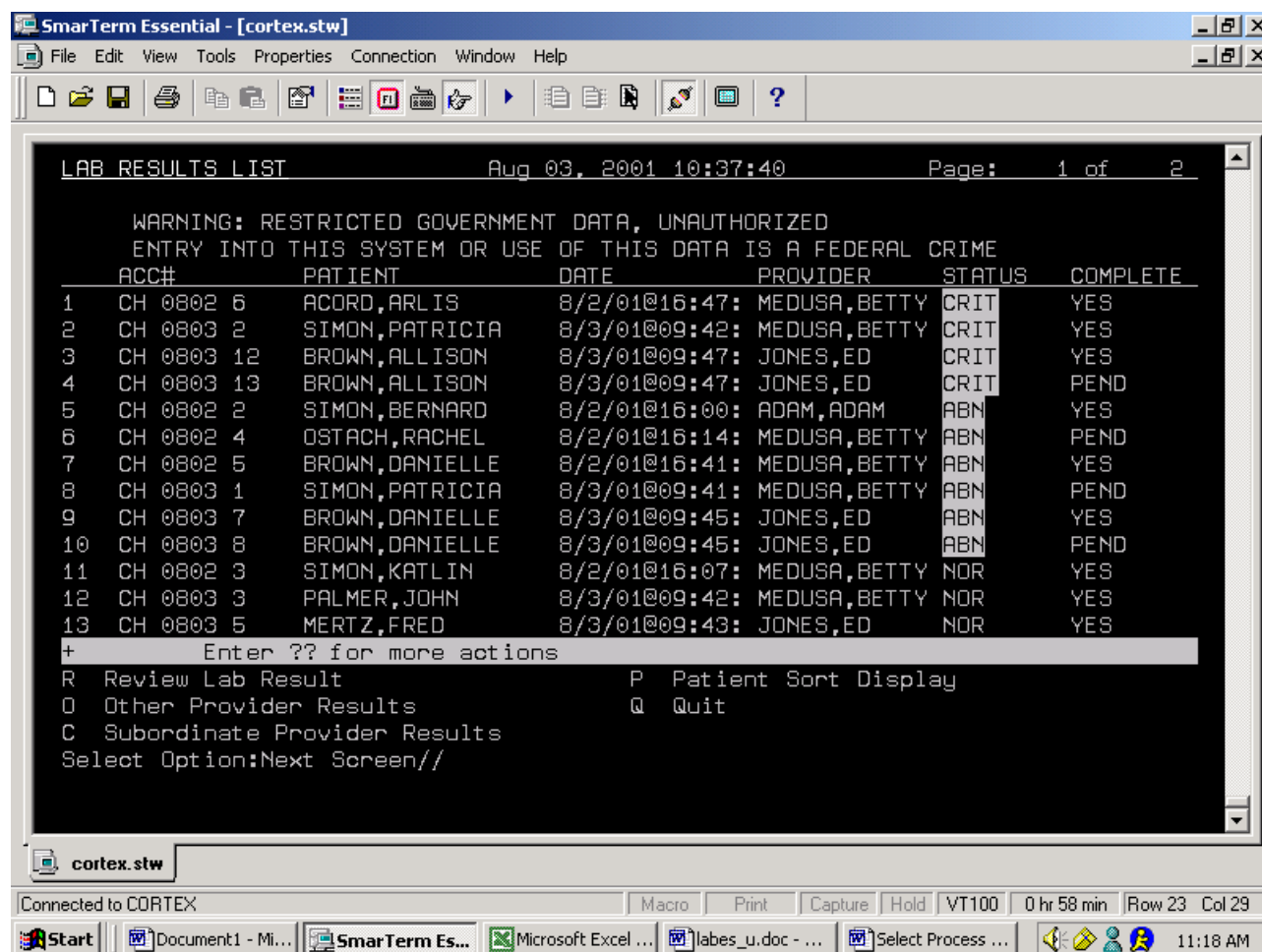
*Figure 4-4: Supervisor review of Subordinate Physicians' Results List*

## 4.3.6    Review

To see the detail of a listed lab result, the 'Review' option may be selected at the prompt. A reviewing physician may select one lab result to review and process or may select multiple lab results accessions to review and process at one time.

```
R  Review Lab Result
O  Other Provider Results
C  Subordinate Provider Results
Select Option: Next Screen// R   Review Lab Result
Please select a lab result to view, by line #:  (1-47): ?

This response must be a list or range, e.g., 1,3,5 or 2-4,8.

Please select a lab result to view, by line #:  (1-47): 1,6,10
```

The first selected lab result is a Hematology panel whose total results is more than 1 page. The default at the following prompt will be 'Next Page' for those labs in which the results do not fit on one page.

Lab Electronic Signature Enhancement (LR)                    V. 5.2, Patch 13
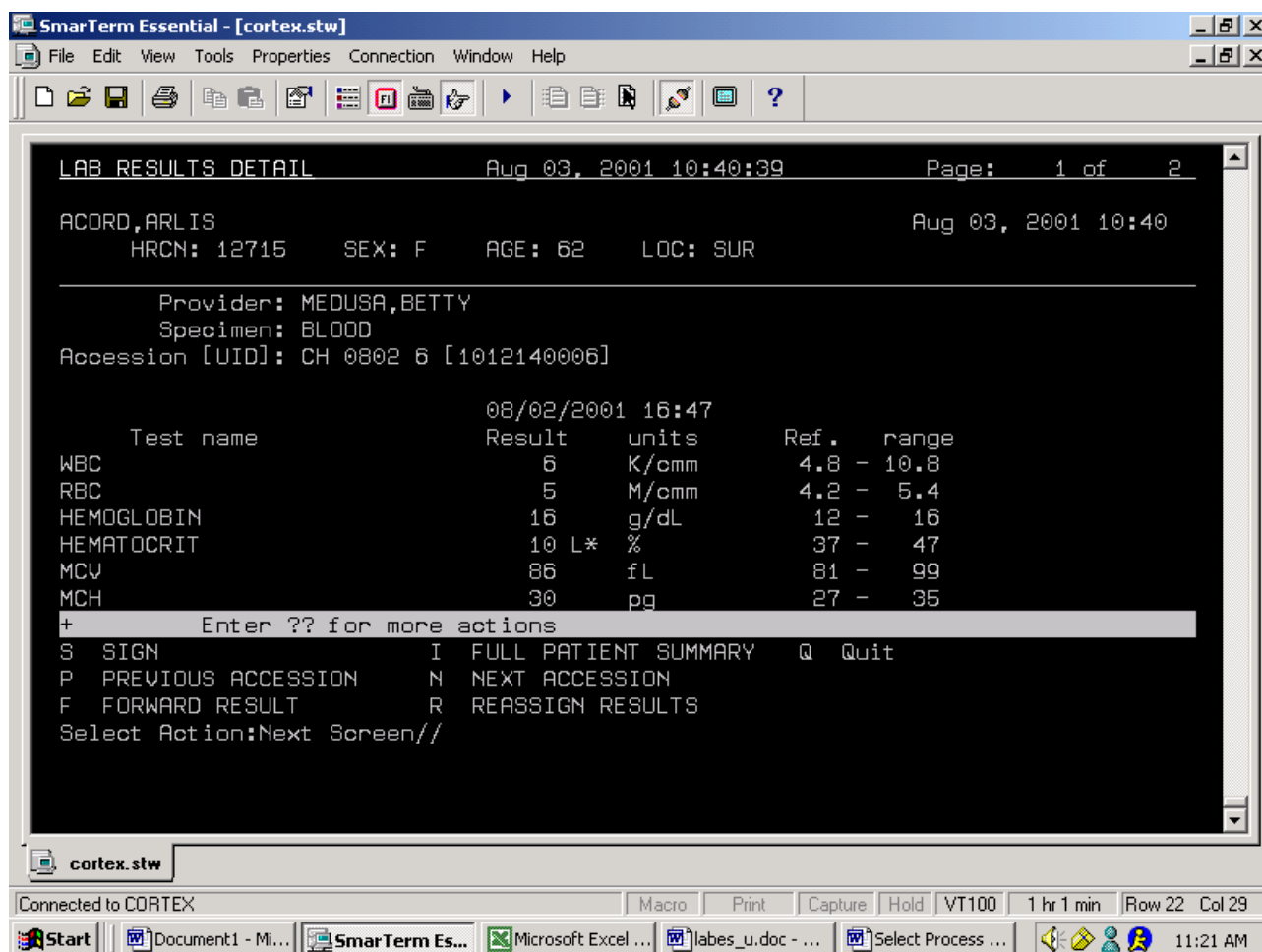
*Figure 4-5: Lab Result Detail Screen – First Page*

Select the 'Next Page' option to continue to see the rest of the results.

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                                                                  September 2002
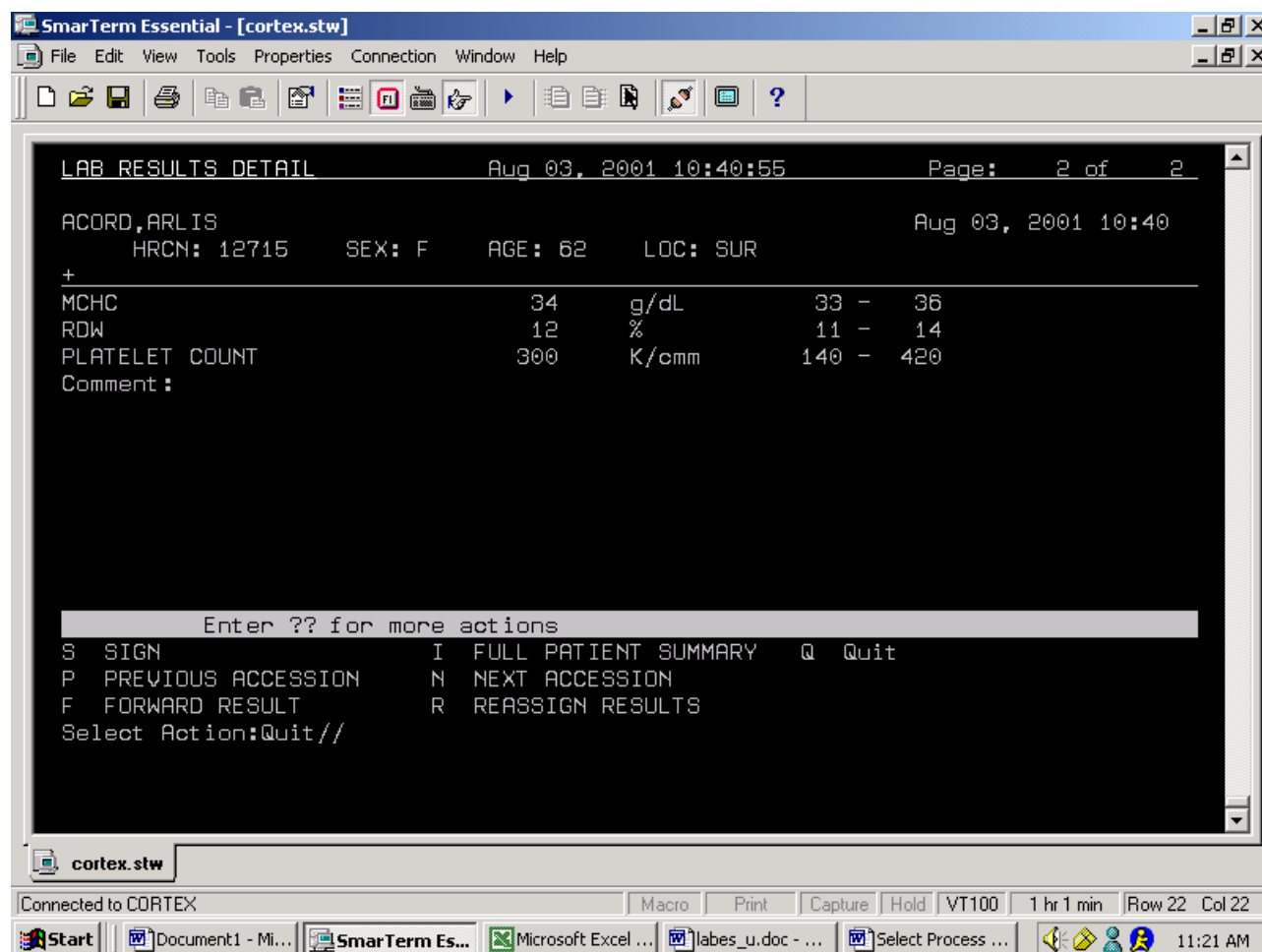
*Figure 4-6: Lab Result Detail Screen – Second Page*

Microbiology results could have several pages of results. In the top right hand corner of the screen, will display the total number of pages of results as well as what the current page of results that is displayed.

### 4.3.6.1    Previous Accession

When multiple accessions have been selected by the participating physician to be reviewed and processed, the 'Previous' action can be used to return to a previous accession.

### 4.3.6.2    Next Accession

When multiple accessions have been selected by the participating physician to be reviewed and processed, the 'Next' action can be used to proceed onto the next accession.

### 4.3.6.3   Sign Action

When a physician selects the 'Sign' action, it indicates that a lab result has been reviewed and processed.  Once signed, it will fall off of the Review List and will appear on the physician's Signed Results Report.  This accession will no longer appear on the physician's review list unless a Lab Technician or Supervisor modifies it.
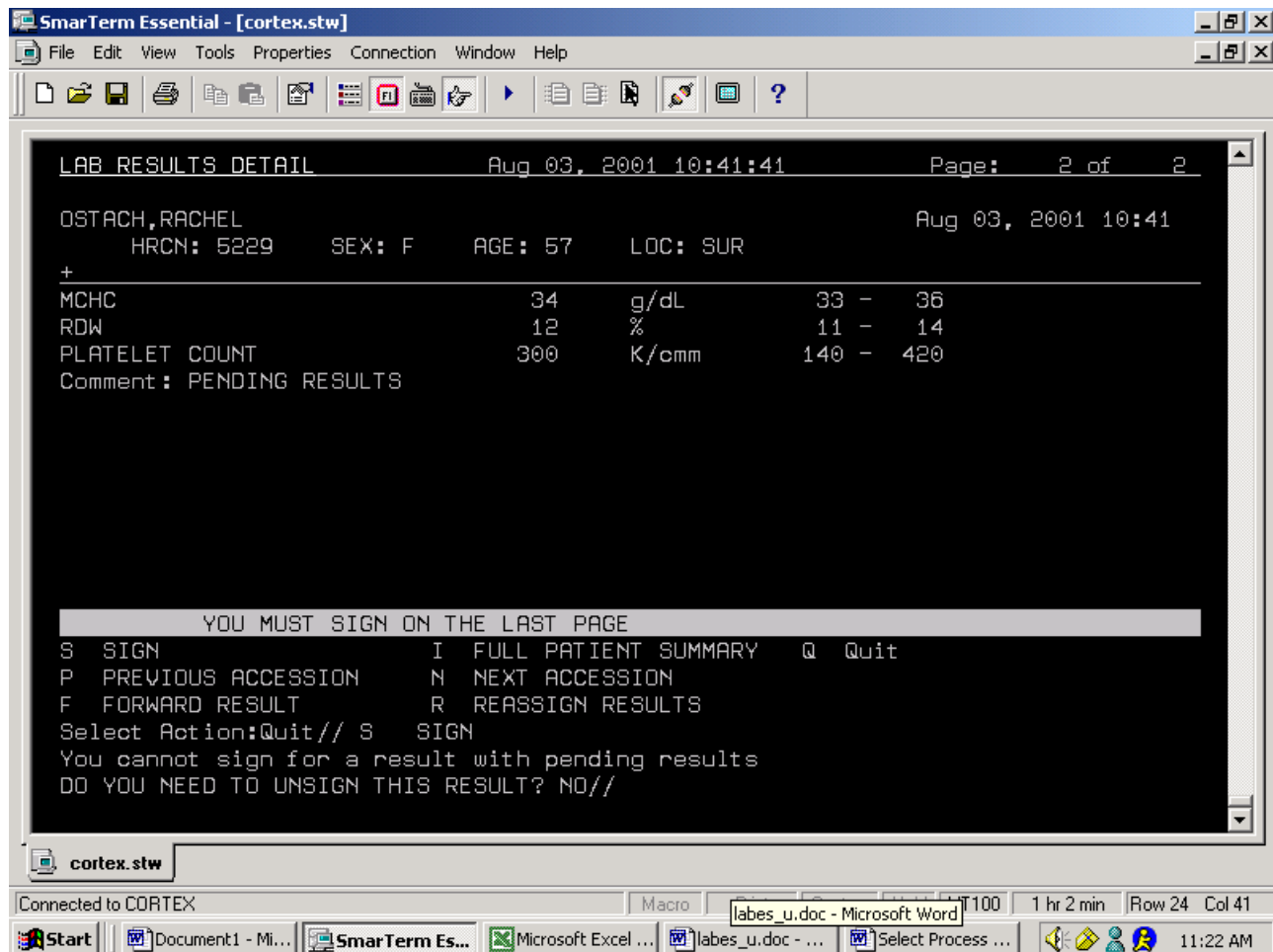


*Figure 4-7: Trying to sign a Pending Accession*

If a result has been defined as a "pending" accession, an accession that contains a result with no entered value, a physician will not be able to 'sign' the accession.  It cannot be signed until all result values have been entered.

If a physician has mistakenly signed off on an accession, they are given an immediate one-time chance to change their mind and 'unsign' the accession at the time of the 'sign' action.  Remember, once signed, the accession will no longer be on the physician's Result List.

#### 4.3.6.4    **Forward Result**

The Forward Result action gives a participating physician the ability to send the results of a particular accession to another physician via a mailman message. 'Additional Comments' may be attached to the message.  A question of whether comments will be added to the message is asked of the physician and answering 'Yes' to this question allows them to add any special comments to the email message containing the lab result for a particular patient.
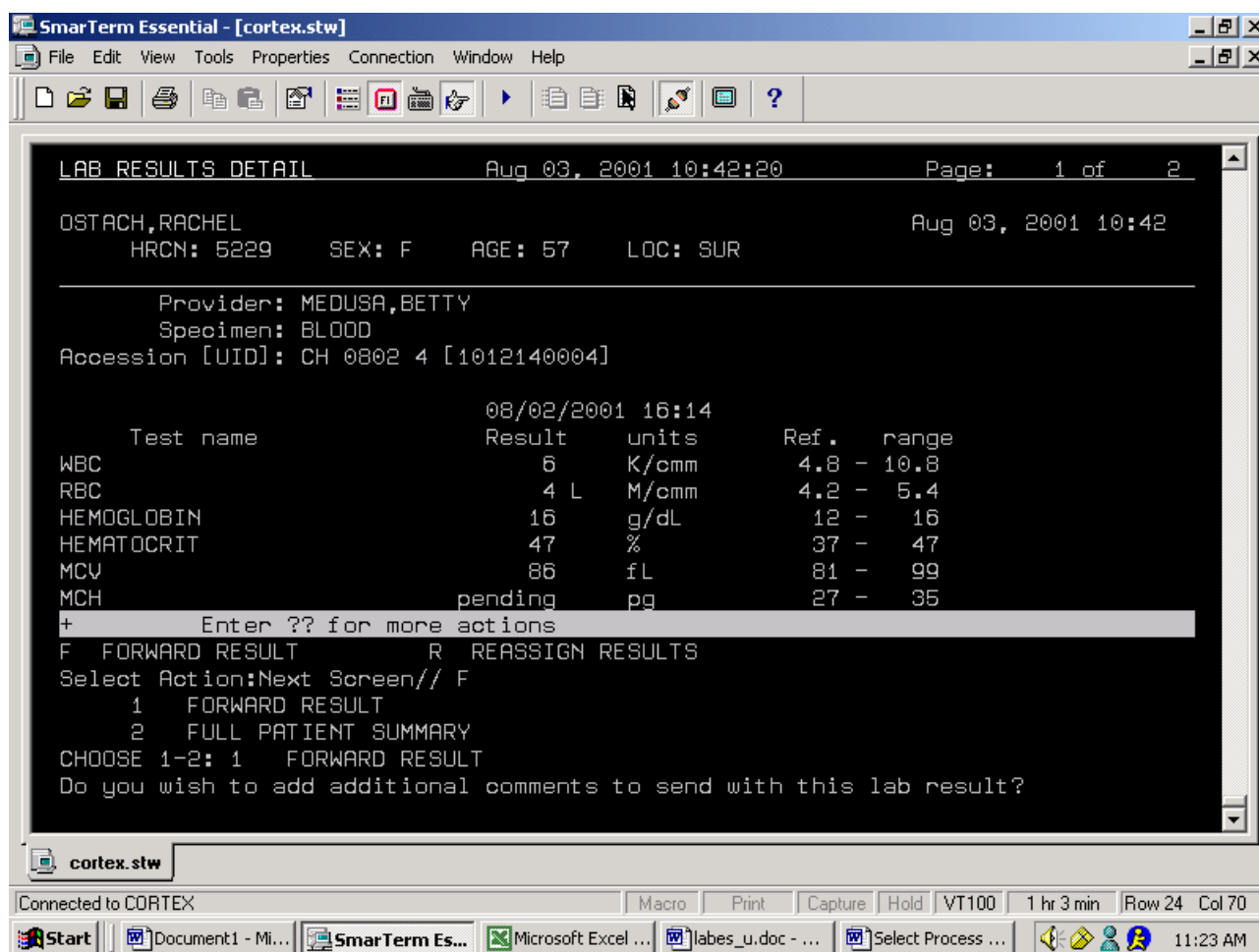


*Figure 4-8: Additional Comments Prompt*
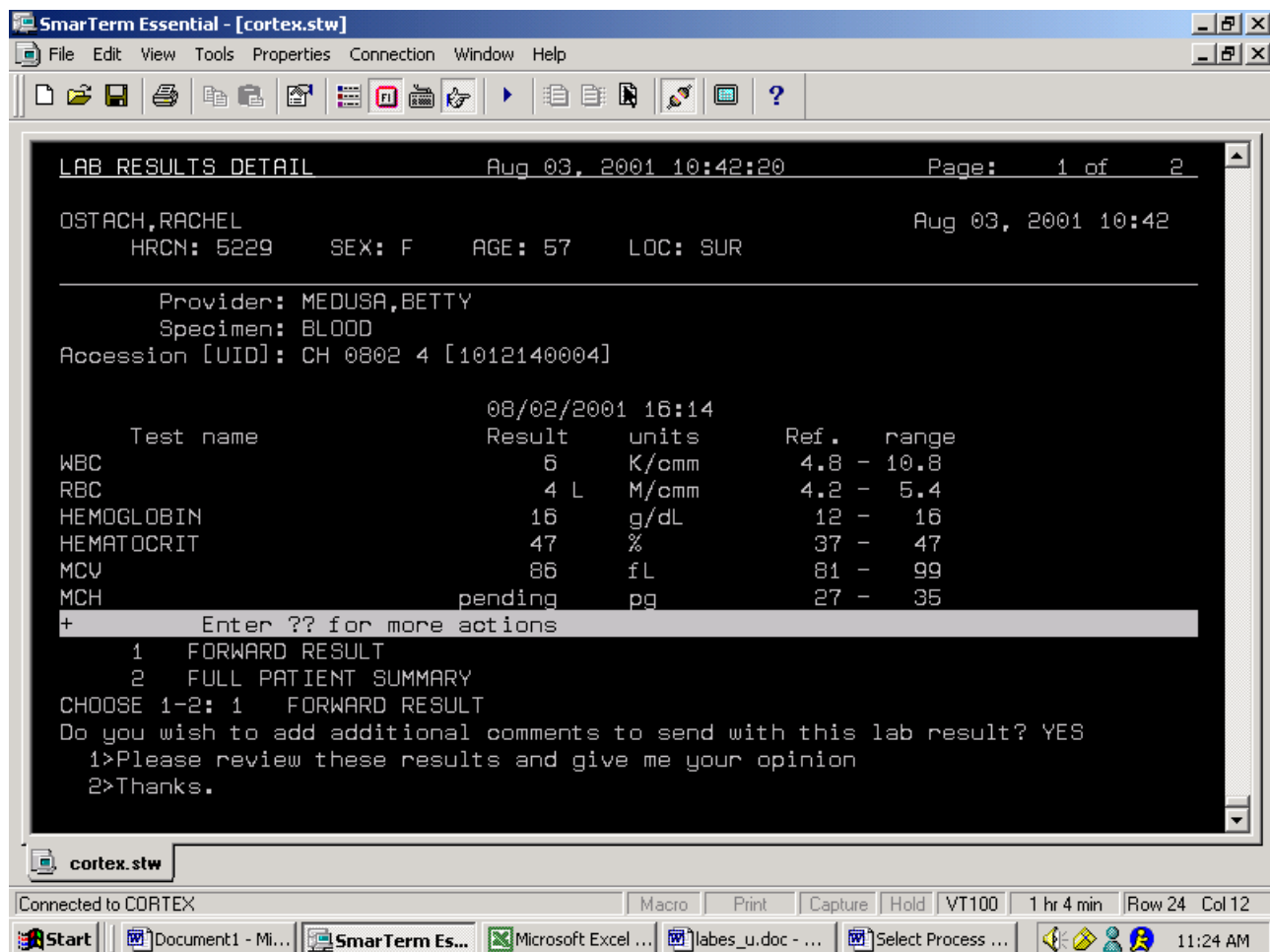
*Figure 4-9: Adding Additional Comments*

A physician using this option will be asked to select the person or persons they would like to send the message to. They may select any user who has been set-up in their RPMS system, this can include providers, supervisor, managers, and does not necessarily have be a Lab Electronic Signature enhancement software package participating provider. This mailman message will be sent via MailMan. If the facility has set up the means to send MailMan messages out across the network, physicians may also be able to send the email outside of their current facility by entering the name and address of the individual (e.g. SMITH@tucson.ihs.gov).

```
 SmarTerm Essential - [cortex.stw]                                    _ |日| X|
 File  Edit  View  Tools  Properties  Connection  Window  Help        _ |日| X|

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 LAB RESULTS DETAIL              Aug 03, 2001 10:42:20       Page:    1 of    2

 OSTACH,RACHEL                                         Aug 03, 2001 10:42
      HRCN: 5229     SEX: F     AGE: 57     LOC: SUR

 _____

         Provider: MEDUSA,BETTY
         Specimen: BLOOD
 Accession [UID]: CH 0802 4 [1012140004]

                          08/02/2001 16:14
      Test name                Result     units       Ref.    range
 WBC                             6       K/cmm       4.8 - 10.8
 RBC                             4 L     M/cmm       4.2 -  5.4
 HEMOGLOBIN                     16       g/dL         12 -  16
 HEMATOCRIT                     47       %            37 -  47
 MCV                            86       fL           81 -  99
 MCH                        pending      pg           27 -  35
 +           Enter ?? for more actions
    1>Please review these results and give me your opinion
    2>Thanks.
    3>
 EDIT Option:
 Send mail to: ADAM,ADAM     Last used MailMan: 03 Jul 01 15:45
 And send to: ▮

 🖳 cortex.stw

 Connected to CORTEX            | Macro | Print | Capture | Hold | VT100 | 1 hr 5 min | Row 24  Col 14
 🏁Start | 🖼 Document1 - Mi... | 🖳SmarTerm Es... | 🗷 Microsoft Excel ... | 🖼 labes_u.doc - ... | 🖼 Select Process ... | 📣◇👤👹  11:25 AM
```

*Figure 4-10: Selecting RPMS user*

When Adam Adam signs on, he will be alerted that he has a mail message to review.
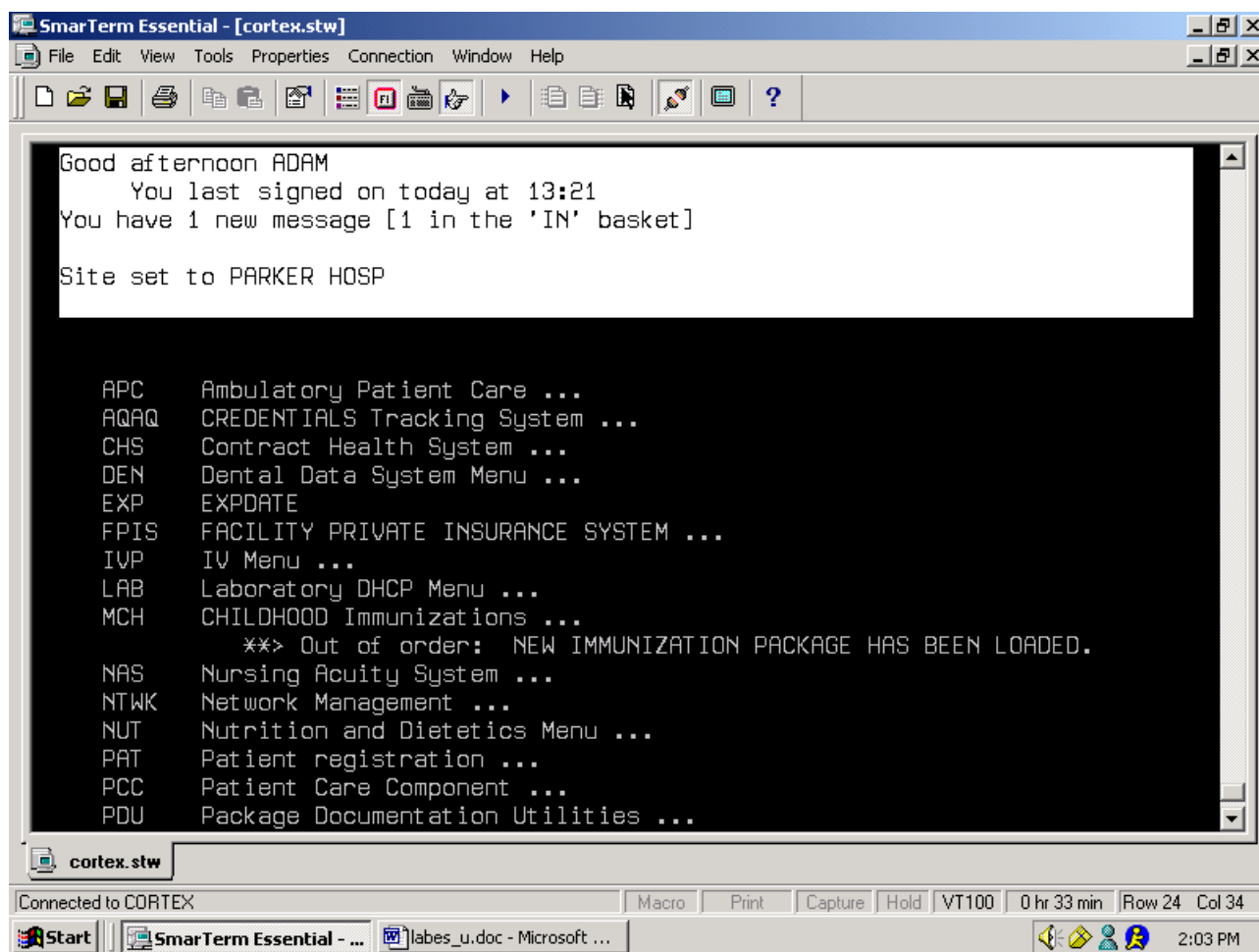
*Figure 4-11: Mail Message Alert*
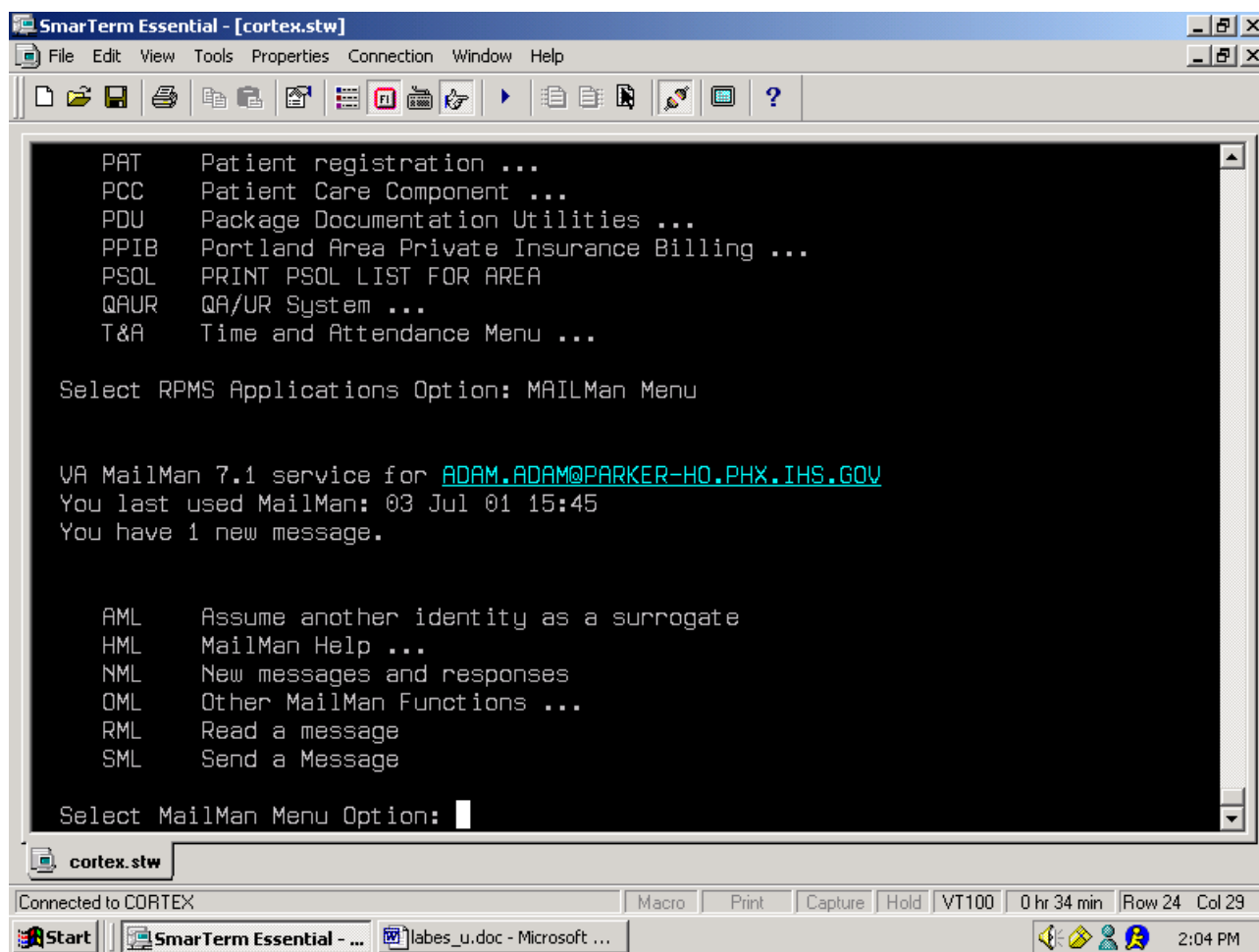
*Figure 4-12: Accessing MailMan*
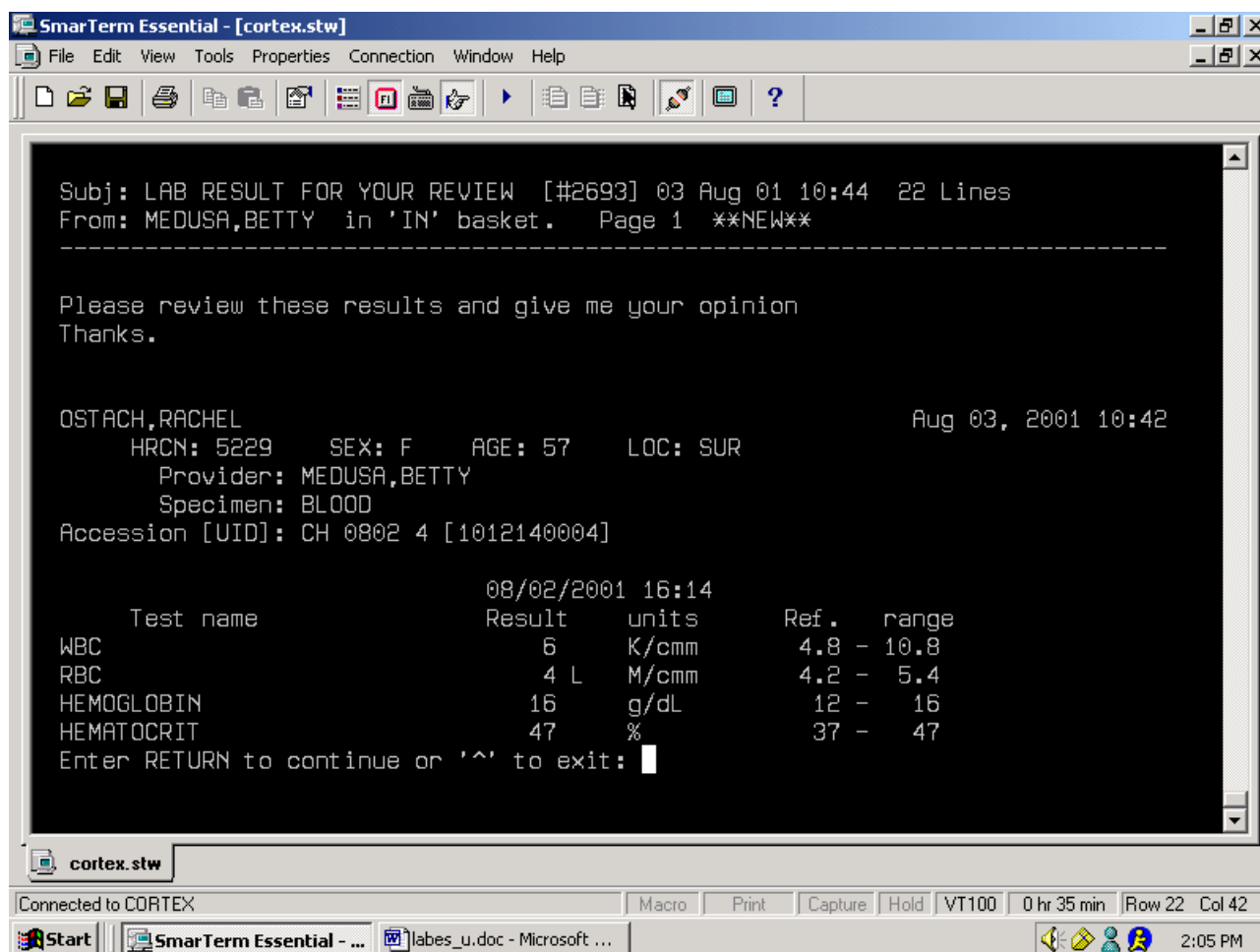
*Figure 4-13: Sample Mail Message with the Additional Comments*

Notice on the next screen that the accession that was forwarded is still on the Review List. The 'Forward Accession' action ONLY emails the results; the responsible physician must still sign it to remove it from their Review List.
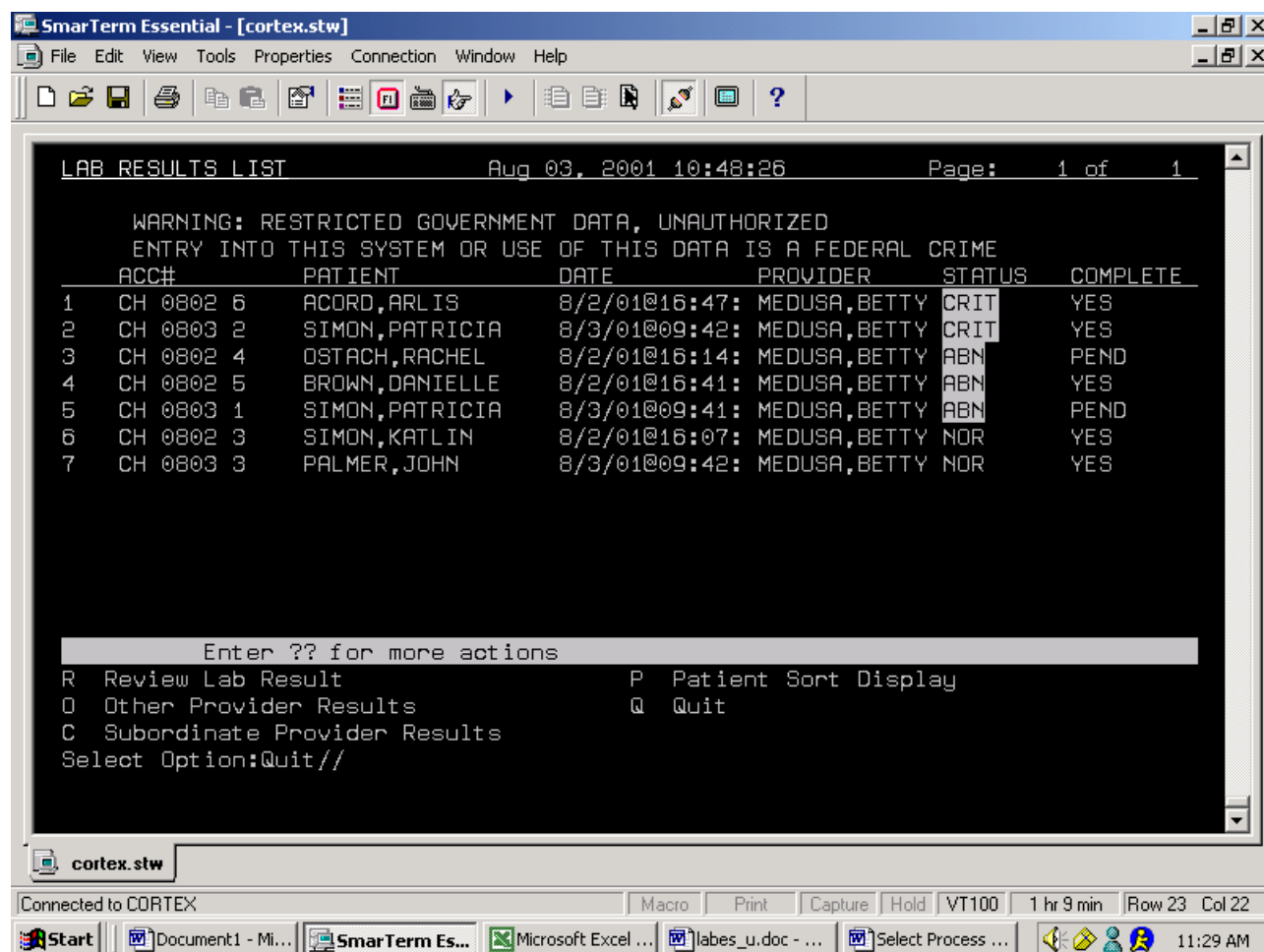
*Figure 4-14: Forwarded Accession Still on Result List*

If a physician wants to change the responsibility of a lab accession, they must 'Reassign' it.

### 4.3.6.5    Reassign Results

Reassigning a lab accession removes the lab accession from the responsible physician and gives it to another participating physician.  A physician may only reassign a lab accession to a participating physician.  The former responsible physician may still be the ordering physician but the lab may be turned over to be reviewed and sign to someone else.
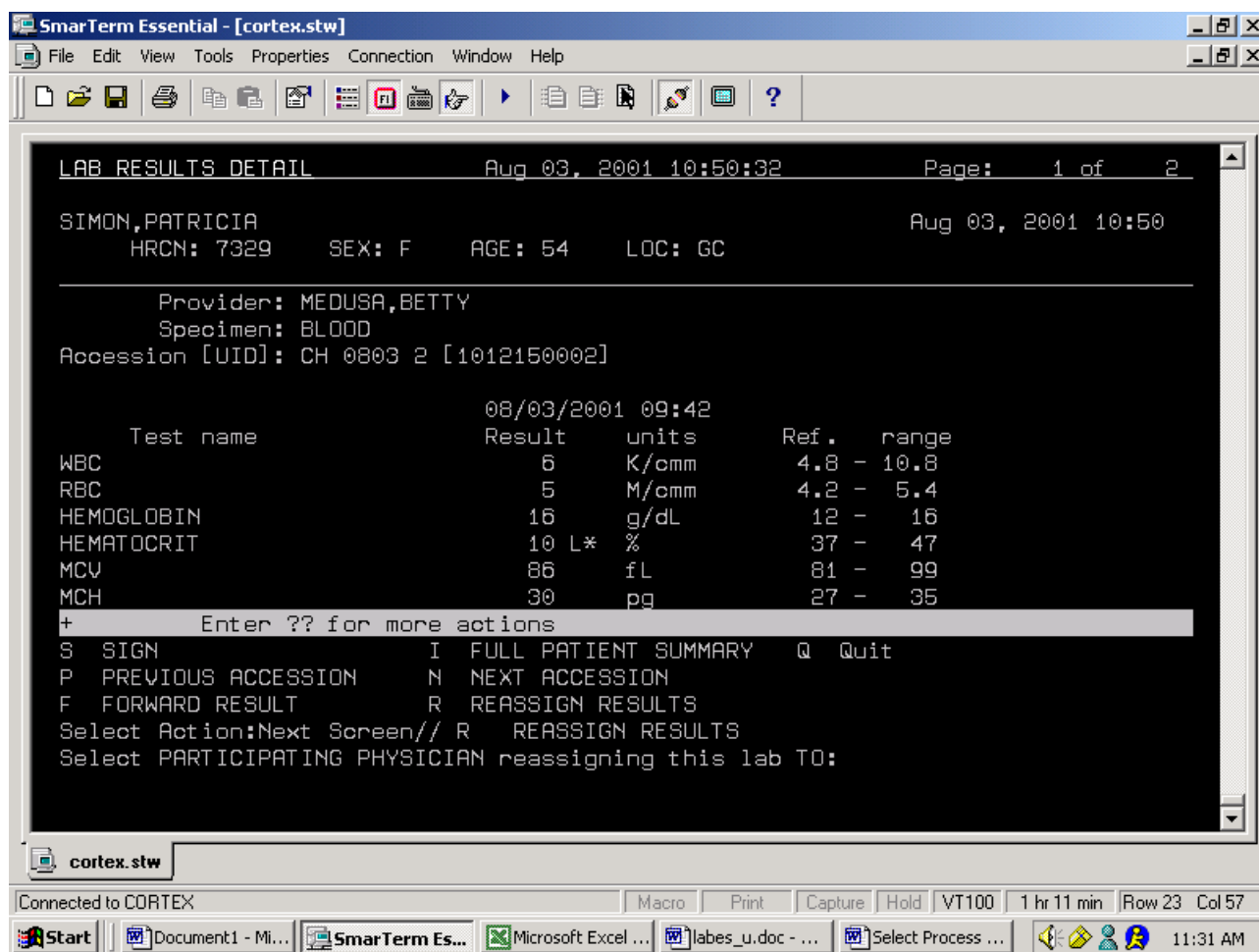
*Figure 4-15: Reassign to another participating physician*

Once reassigned, the lab accession will no longer be on the physician's Result list.

```
SmarTerm Essential - [cortex.stw]                                                    _ 🗗 ✕
File  Edit  View  Tools  Properties  Connection  Window  Help                       _ 🗗 ✕

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  LAB RESULTS LIST              Aug 03, 2001 10:51:45        Page:    1 of    1

      WARNING: RESTRICTED GOVERNMENT DATA, UNAUTHORIZED
      ENTRY INTO THIS SYSTEM OR USE OF THIS DATA IS A FEDERAL CRIME
      ACC#            PATIENT          DATE            PROVIDER        STATUS   COMPLETE
  1   CH 0802 6   ACORD,ARLIS      8/2/01@16:47: MEDUSA,BETTY CRIT    YES
  2   CH 0802 4   OSTACH,RACHEL    8/2/01@16:14: MEDUSA,BETTY ABN     PEND
  3   CH 0802 5   BROWN,DANIELLE   8/2/01@16:41: MEDUSA,BETTY ABN     YES
  4   CH 0803 1   SIMON,PATRICIA   8/3/01@09:41: MEDUSA,BETTY ABN     PEND
  5   CH 0802 3   SIMON,KATLIN     8/2/01@16:07: MEDUSA,BETTY NOR     YES
  6   CH 0803 3   PALMER,JOHN      8/3/01@09:42: MEDUSA,BETTY NOR     YES




                   Enter ?? for more actions
  R   Review Lab Result              P  Patient Sort Display
  O   Other Provider Results         Q  Quit
  C   Subordinate Provider Results
  Select Option:Quit// ▮

  cortex.stw

Connected to CORTEX                    Macro   Print   Capture  Hold  VT100  1 hr 12 min  Row 23  Col 22
Start    Document1 - Mi...  SmarTerm Es...  Microsoft Excel ...  labes_u.doc - ...  Select Process ...   11:32 AM
```

*Figure 4-16: Reassigned Accession Removed from Result List*

### 4.3.6.6    Full Patient Summary
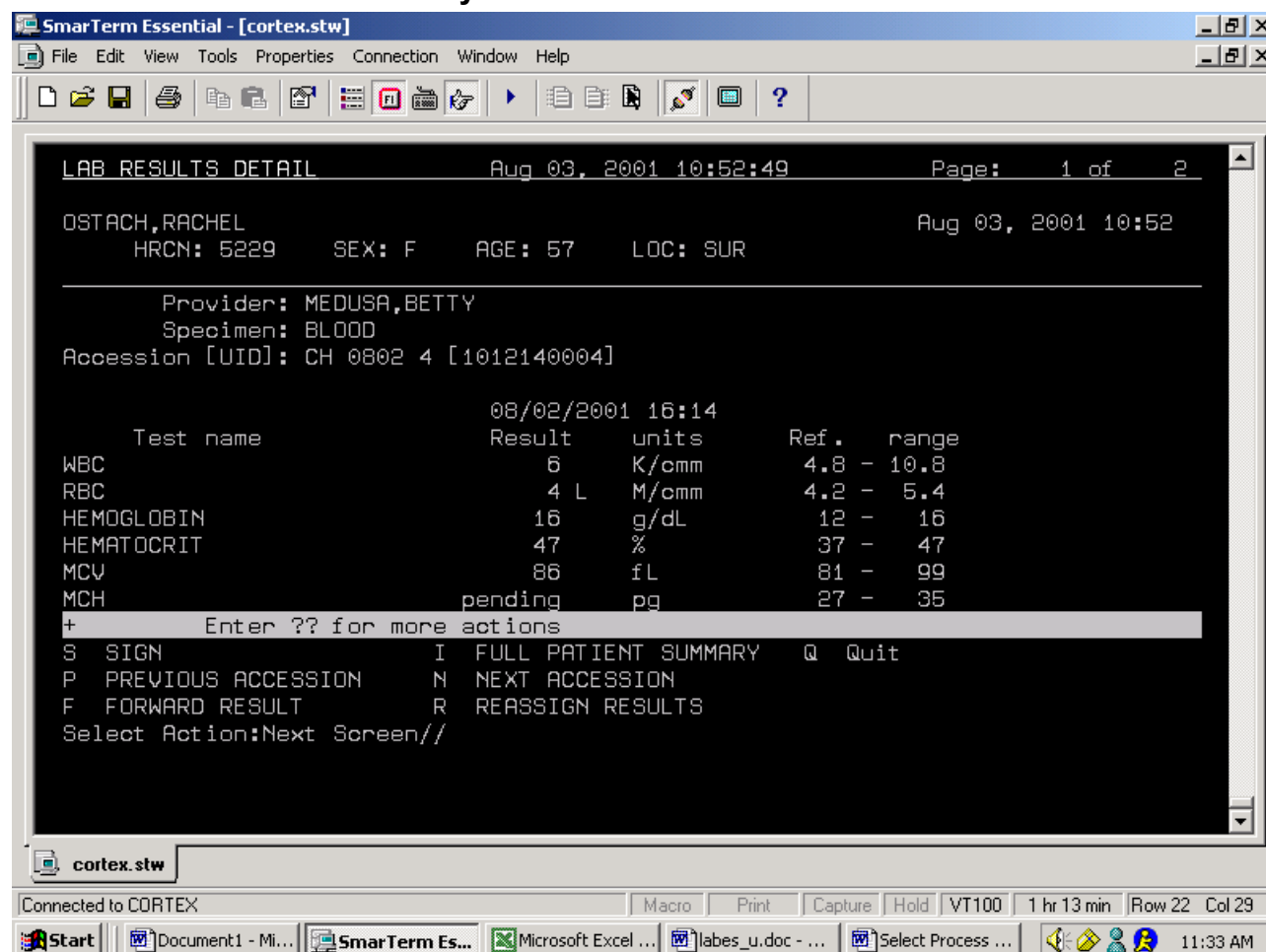


*Figure 4-17: The Full Patient Summary can be accessed during the review of a lab result*

# 5.0 Reports

There are currently only two reports in the RPMS Lab Electronic Signature Enhancement: the Signed Lab Results Report and the Delinquent Lab Results Report.

## 5.1 Signed Lab Results Report

The Signed Lab Results Report displays a historical record of each lab accession that a participating physician was responsible for and by whom and when that lab result was signed. This can provide a guide for a physician on whom signed their lab results if surrogates have been defined. This report will be sorted by LAB DATE (collection date) and displayed on the screen from the most recent down to the oldest.
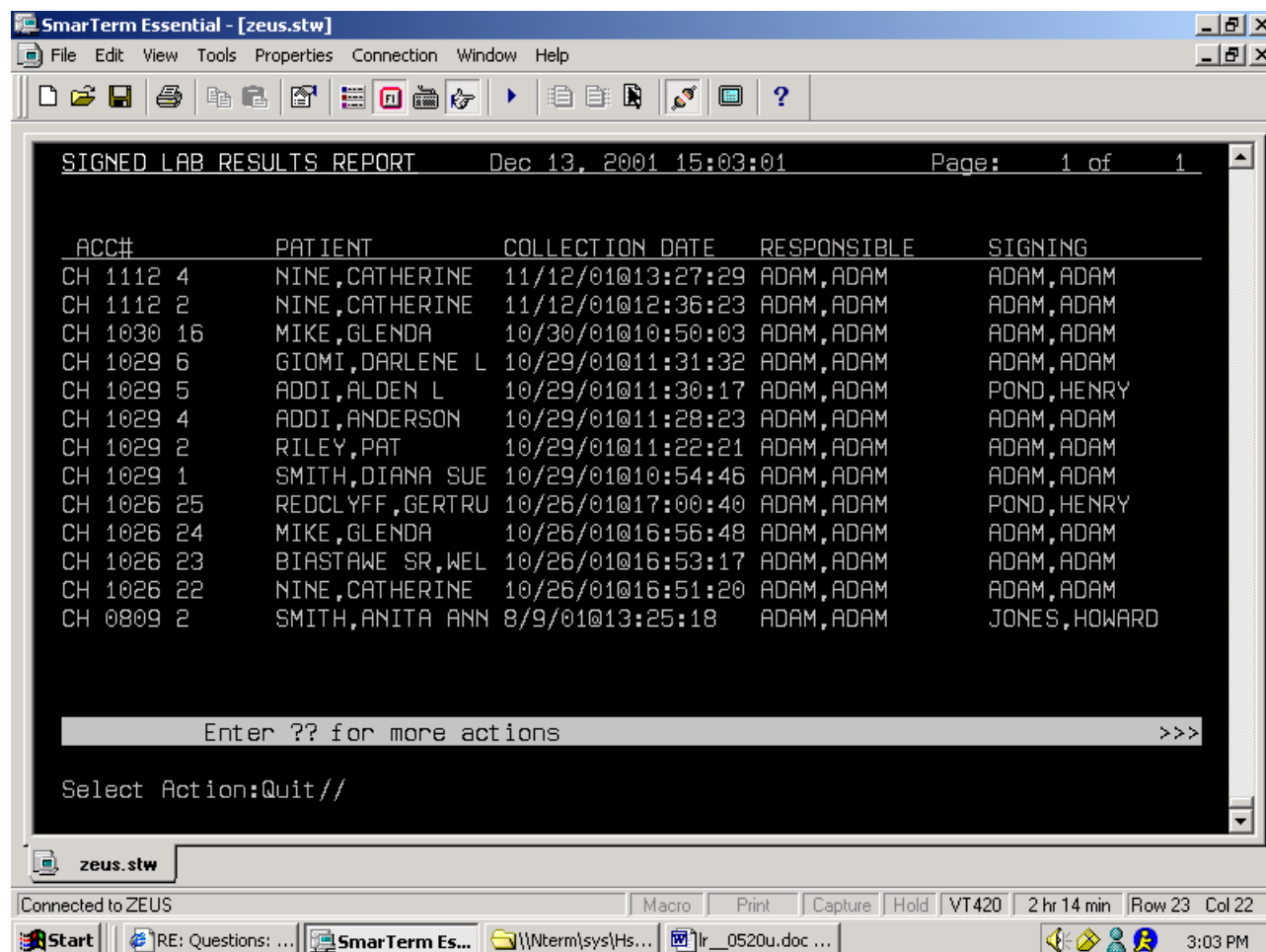


Since the amount of information does not quite fit a screen, one column does not immediately show. By entering a '>' at the 'Select Action' prompt, the last column can be seen.

```
SmarTerm Essential - [zeus.stw]                                              _ |8| X|
File   Edit   View   Tools   Properties   Connection   Window   Help          _ |8| X|

D ☞ 🖬  🖨  ▣ ▤  ▦  ▤ ▣ ▤ ▦  ▶  ▣ ▤ ▣  📓  ▣  ?

SIGNED LAB RESULTS REPORT      Dec 13, 2001 15:03:20        Page:    1 of    1  ▲

ENT           COLLECTION DATE    RESPONSIBLE      SIGNING        DATE/TIME SIGNED
,CATHERINE    11/12/01@13:27:29  ADAM,ADAM        ADAM,ADAM      11/12/01@13:32:04
,CATHERINE    11/12/01@12:36:23  ADAM,ADAM        ADAM,ADAM      11/12/01@12:55:24
,GLENDA       10/30/01@10:50:03  ADAM,ADAM        ADAM,ADAM      11/13/01@10:19:51
I,DARLENE L   10/29/01@11:31:32  ADAM,ADAM        ADAM,ADAM      10/30/01@16:35:32
,ALDEN L      10/29/01@11:30:17  ADAM,ADAM        POND,HENRY     10/29/01@14:01:09
,ANDERSON     10/29/01@11:28:23  ADAM,ADAM        ADAM,ADAM      10/29/01@13:56:33
Y,PAT         10/29/01@11:22:21  ADAM,ADAM        ADAM,ADAM      10/30/01@09:07:31
H,DIANA SUE   10/29/01@10:54:46  ADAM,ADAM        ADAM,ADAM      12/11/01@14:08:12
LYFF,GERTRU   10/26/01@17:00:40  ADAM,ADAM        POND,HENRY     10/29/01@14:00:45
,GLENDA       10/26/01@16:56:48  ADAM,ADAM        ADAM,ADAM      11/12/01@13:04:31
TAWE SR,WEL   10/26/01@16:53:17  ADAM,ADAM        ADAM,ADAM      10/29/01@13:56:21
,CATHERINE    10/26/01@16:51:20  ADAM,ADAM        ADAM,ADAM      11/12/01@13:39:15
H,ANITA ANN   8/9/01@13:25:18    ADAM,ADAM        JONES,HOWARD   10/24/01@14:11:45


   <<<      Enter ?? for more actions

Select Action:Quit// █                                                       ▼

 zeus.stw

Connected to ZEUS                    Macro   Print   Capture  Hold  VT420  2 hr 15 min  Row 23  Col 22
Start   RE: Questions: ...  SmarTerm Es...  \\Nterm\sys\Hs...  lr__0520u.doc ...     3:04 PM
```

## 5.2    Delinquent Lab Results Report

The Delinquent Lab Results Report is for supervisors only and contains a list of all
outstanding unsigned lab results for those physicians who are subordinate to the
supervisor. This list is sorted by Critical Results first, Abnormal Results second, and
Normal Results third. Critical Results are highlighted and will blink. Abnormal
Results are only highlighted. A lab result is considered delinquent if the number of
days to review exceeds the number defined in the supervisors setup. The supervisor
has the ability to define this number for each of the type of lab results. See Section
2.2 for more information on these three fields.
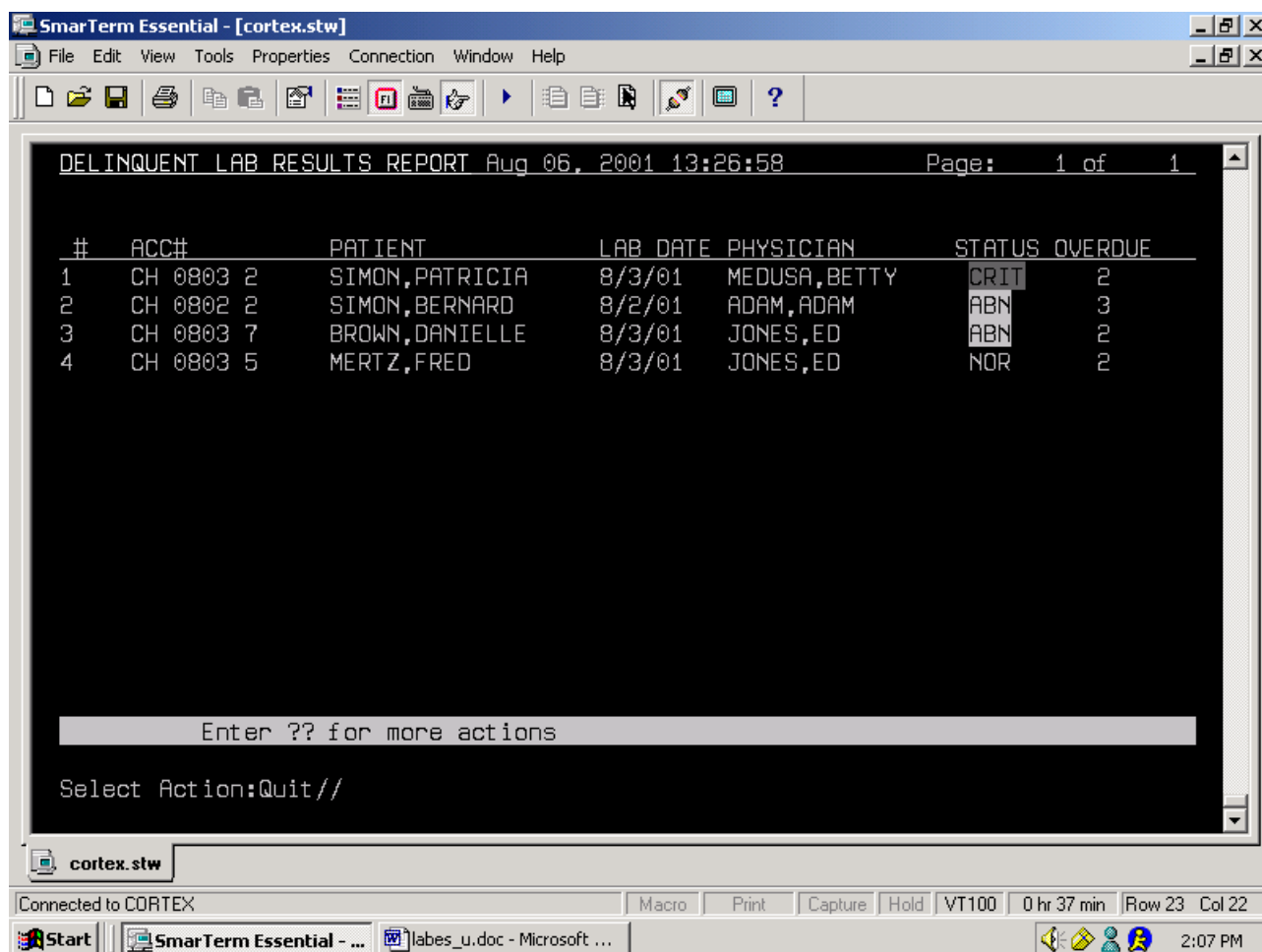
# 6.0    Audit Tracking

Anyone who has been assigned the BLRAZLAB security key has the sensitive job of monitoring users viewing patients' lab results. There are two options that the BLRAZLAB security gives access to; the audit report and the archive and purge option. The auditing of the Lab ESIG software must be turned "ON" at your site for the Audit report to be used.

> **Warning**: If your site does NOT have auditing of the Lab ESIG software turned on, please see your supervisor or IRM. To turn on audit and archiving, see the section 6.3 of this manual and the post-install section of the Installation Manual/Release Notes for the Lab Electronic Signature Enhancement V. 5.2, Patch 13.

## 6.1    AUDIT EVENTS

The current five RPMS Menu options that will log an audit event are:

Interim Report [LRRP2]
Interim Report by Provider [LRRD]
Interim Report by Location [LRRS]
Interim Report for 1 Provider [BLR LRRD BY MD]
Interim Report for 1 Location [LRRS BY LOC]

Another function that will log an audit event is the new Lab Review/Sign Lab Results menu option. If a participating physician reviews the detail of a lab accession, the review event will be logged to the Lab Audit File.

## 6.2    LAB AUDIT REPORT

The Print Lab Audit Report displays the information about users reviewing lab results. There are several different ways in which this data can be presented on the report. The specific information that is displayed are the date and time that the user reviewed the lab accession, the user who reviewed the lab accession, the menu option the user used to review the lab accession, the patient, and the lab accession.

> **Note**: To run this report you must have the BLRAZLAB security key. If you need access to this option, please see your site IRM. The site may choose to allocate the security key to a single individual who will run the report for all other personnel.

```
Select OPTION NAME: BLRA LAB AUDIT REPORT           Print Lab Audit Report
Print Lab Audit Report
     Report Options

 1) By Date Range
 2) By Single Date
 3) By User
 4) By Menu Option
 5) QUIT
Select Report Option:  (1-5):
```

## 6.2.1   Date Range

Selecting to print the Lab Audit Report by Date Range sorts the output by the Date and Time that a user reviewed a particular accession for the specified date range.

```
Select Lab Menu Testing Option: REP  Print Lab Audit Report
Print Lab Audit Report
     Report Options

 1) By Date Range
 2) By Single Date
 3) By User
 4) By Menu Option
 5) QUIT
Select Report Option:  (1-5): 1
Date to START with: T-10  (MAY 06, 2002)  <START DATE must be before the END
DATE>
Date to END with: T  (MAY 16, 2002)
DEVICE:     Right Margin: 80//  <select a printer to print report to or press
return to print to your screen>
```

```
*** CONFIDENTIAL DATA ***
LAB AUDIT REPORT BY DATE RANGE: 05/06/2002 THRU 05/16/2002
                                        MAY 16,2002  14:51    PAGE 1
DATE/TIME STAMP     USER            MENU OPTION   PATIENT        ACCESSION
--------------------------------------------------------------------------------

5/7/2002@11:32:21   MITRETEK,PROG   E-SIG REVIEW   JABBENAME,SUN   HE 0503 2
5/7/2002@11:32:33   MITRETEK,PROG   E-SIG REVIEW   KAALAR,BIANCA   CH 0507 1
5/7/2002@11:41:56   MITRETEK,PROG   E-SIG REVIEW   KAALAR,BIANCA   CH 0507 1
5/7/2002@13:59      MITRETEK,PROG   E-SIG REVIEW   GATOR,ALLI      CH 0507 2
5/7/2002@14:00:24   MITRETEK,PROG   E-SIG REVIEW   GATOR,ALLI      CH 0507 2
5/7/2002@14:07:33   MITRETEK,PROG   E-SIG REVIEW   GATOR,ALLI      CH 0507 2
5/8/2002@11:36:01   MITRETEK,PROG   E-SIG REVIEW   GATOR,ALLI      CH 0507 2
5/13/2002@13:30:2   MITRETEK,PROG   E-SIG REVIEW   HAETLAI,MARVI   HE 0503 3
5/13/2002@13:30:3   MITRETEK,PROG   E-SIG REVIEW   KAALAR,BIANCA   HE 0503 5
5/13/2002@13:30:4   MITRETEK,PROG   E-SIG REVIEW   JABBENAME,SUN   HE 0503 2
5/13/2002@13:30:4   MITRETEK,PROG   E-SIG REVIEW   JABBENAME,SUN   HE 0503 2
5/13/2002@13:31:1   MITRETEK,PROG   E-SIG REVIEW   KAALAR,BIANCA   CH 0507 1
5/14/2002@11:08:5   MITRETEK,PROG   E-SIG REVIEW   HAETLAI,MARVI   HE 0503 3
5/15/2002@17:23:2   MITRETEK,PROG   E-SIG REVIEW   GATOR,ALLI      CH 0507 2
5/16/2002@14:45:5   MITRETEK,PROG   IR FOR 1 LOC   KAALAR,JERICO   HE 0516 3
5/16/2002@14:45:5   MITRETEK,PROG   IR FOR 1 LOC   KAALAR,JERICO   HE 0516 2
5/16/2002@14:46:1   MITRETEK,PROG   IR FOR 1 MD    HAETLAI,MARVI   HE 0503 3
5/16/2002@14:46:1   MITRETEK,PROG   IR FOR 1 MD    JABBENAME,SUN   HE 0503 2
5/16/2002@14:46:1   MITRETEK,PROG   IR FOR 1 MD    JABBENAME,SUN   HE 0503 1
5/16/2002@14:46:1   MITRETEK,PROG   IR FOR 1 MD    KAALAR,BIANCA   CH 0507 1
5/16/2002@14:46:1   MITRETEK,PROG   IR FOR 1 MD    KAALAR,BIANCA   HE 0503 5
```

*Figure 6-1: Audit Report by Date Range*


## 6.2.2   Single Date

Selecting to print the Lab Audit Report by Single Date sorts the output by the Date and Time that a user reviewed a particular accession for the specified date.

```
Select Lab Menu Testing Option: REP  Print Lab Audit Report
Print Lab Audit Report
     Report Options

 1) By Date Range
 2) By Single Date
 3) By User
 4) By Menu Option
 5) QUIT
Select Report Option:  (1-5): 1
Date to START with: T  (MAY 16, 2002)
Date to END with: T  (MAY 16, 2002)
DEVICE:    Right Margin: 80//  <select a printer to print report to or press
return to print to your screen>
```

```
*** CONFIDENTIAL DATA ***
LAB AUDIT REPORT BY SINGLE DATE: 05/16/2002
                                    MAY 16,2002  14:48    PAGE 1
DATE/TIME STAMP     USER            MENU OPTION  PATIENT        ACCESSION
-----------------------------------------------------------------------

5/16/2002@14:20:2  MITRETEK,PROG   E-SIG REVIEW  KAALAR,JERICO  HE 0516 3
5/16/2002@14:44:3  MITRETEK,PROG   INT RPT-IR    WEBNOM,CLIFTO  HE 0516 4
5/16/2002@14:44:5  MITRETEK,PROG   IR BY MD      HAETLAI,MARVI  HE 0503 3
5/16/2002@14:44:5  MITRETEK,PROG   IR BY MD      JABBENAME,SUN  HE 0503 2
5/16/2002@14:44:5  MITRETEK,PROG   IR BY MD      JABBENAME,SUN  HE 0503 1
5/16/2002@14:45:2  MITRETEK,PROG   IR BY LOC     HALLAR,BROOKL  UA 0510 1
5/16/2002@14:45:2  MITRETEK,PROG   IR BY LOC     KAALAR,JERICO  HE 0516 3
5/16/2002@14:45:2  MITRETEK,PROG   IR BY LOC     KAALAR,JERICO  HE 0516 2
5/16/2002@14:45:2  MITRETEK,PROG   IR BY LOC     WEBNOM,CLIFTO  HE 0516 4
5/16/2002@14:45:5  MITRETEK,PROG   IR FOR 1 LOC  KAALAR,JERICO  HE 0516 3
5/16/2002@14:45:5  MITRETEK,PROG   IR FOR 1 LOC  KAALAR,JERICO  HE 0516 2
5/16/2002@14:46:1  MITRETEK,PROG   IR FOR 1 MD   HAETLAI,MARVI  HE 0503 3
5/16/2002@14:46:1  MITRETEK,PROG   IR FOR 1 MD   JABBENAME,SUN  HE 0503 2
5/16/2002@14:46:1  MITRETEK,PROG   IR FOR 1 MD   JABBENAME,SUN  HE 0503 1
5/16/2002@14:46:1  MITRETEK,PROG   IR FOR 1 MD   KAALAR,BIANCA  CH 0507 1
5/16/2002@14:46:1  MITRETEK,PROG   IR FOR 1 MD   KAALAR,BIANCA  HE 0503 5
```

*Figure 6-2: Audit Report by Single Date*

## 6.2.3   User

Selecting to print the Lab Audit Report by User allows the auditor to select a specific user or users to print the report by.  The auditor will be prompted for a list of users to select from.  This list is based upon all users who have an entry in the Lab Audit File.

```
Select Lab Menu Testing Option: REP  Print Lab Audit Report
     Report Options

 1) By Date Range
 2) By Single Date
 3) By User
 4) By Menu Option
 5) QUIT
Select Report Option:  (1-5): 3
   Select User(s):
          1  MITRETEK,PROGRAMMER
          2  MEDUSA,BETTY
          3  JONES,ED
Enter a list or range of numbers (1-3): 1
DEVICE:      Right Margin:80// <select a printer to print report to or press
return to print to your screen>
```

```
*** CONFIDENTIAL DATA ***
LAB AUDIT REPORT BY USER: MITRETEK,PROGRAMMER
                                            MAY 16,2002  14:55    PAGE 1
DATE/TIME STAMP     USER           MENU OPTION  PATIENT         ACCESSION
-----------------------------------------------------------------------------

5/3/2002@14:55:19  MITRETEK,PROG  E-SIG REVIEW  JABBENAME,SUN   HE 0503 2
5/3/2002@15:00:30  MITRETEK,PROG  E-SIG REVIEW  TACOBA,ANDY     HE 0503 4
5/3/2002@15:00:37  MITRETEK,PROG  E-SIG REVIEW  TACOBA,ANDY     HE 0503 4
5/3/2002@15:00:39  MITRETEK,PROG  E-SIG REVIEW  KAALAR,BIANCA   HE 0503 5
5/3/2002@15:00:40  MITRETEK,PROG  E-SIG REVIEW  JABBENAME,SUN   HE 0503 2
5/3/2002@15:00:42  MITRETEK,PROG  E-SIG REVIEW  JABBENAME,SUN   HE 0503 2
5/3/2002@15:00:43  MITRETEK,PROG  E-SIG REVIEW  JABBENAME,SUN   HE 0503 2
5/3/2002@15:00:46  MITRETEK,PROG  E-SIG REVIEW  JABBENAME,SUN   HE 0503 2
5/3/2002@15:00:52  MITRETEK,PROG  E-SIG REVIEW  TACOBA,ANDY     HE 0503 4
5/7/2002@11:32:21  MITRETEK,PROG  E-SIG REVIEW  JABBENAME,SUN   HE 0503 2
5/7/2002@11:32:33  MITRETEK,PROG  E-SIG REVIEW  KAALAR,BIANCA   CH 0507 1
5/7/2002@11:41:56  MITRETEK,PROG  E-SIG REVIEW  KAALAR,BIANCA   CH 0507 1
5/7/2002@13:59     MITRETEK,PROG  E-SIG REVIEW  GATOR,ALLI      CH 0507 2
5/7/2002@14:00:24  MITRETEK,PROG  E-SIG REVIEW  GATOR,ALLI      CH 0507 2
5/7/2002@14:07:33  MITRETEK,PROG  E-SIG REVIEW  GATOR,ALLI      CH 0507 2
5/8/2002@11:36:01  MITRETEK,PROG  E-SIG REVIEW  GATOR,ALLI      CH 0507 2
5/13/2002@13:30:2  MITRETEK,PROG  E-SIG REVIEW  HAETLAI,MARVI   HE 0503 3
```

*Figure 6-3: Audit Report by User*

## 6.2.4    Menu Option

Selecting to print the Lab Audit Report by Menu Option allows the auditor to select a specific menu option or options to print the report by.  The auditor will be prompted for a list of menu options to select from.  This list is based upon all menu options that have an entry in the Lab Audit File.

```
Select Lab Menu Testing Option:  BLRA LAB AUDIT REPORT      Print Lab Audit
Report
Print Lab Audit Report
     Report Options

 1) By Date Range
 2) By Single Date
 3) By User
 4) By Menu Option
 5) QUIT
Select Report Option:  (1-5): 4
   Select Menu Option(s):
         1  Interim reports by location (manual queue)
         2  Interim reports for 1 location (manual queue)
         3  Interim report
         4  Interim report by provider
         5  IHS Interim report for 1 provider (manual queue)
         6  Review/Sign Lab Results **NEW**
Enter a list or range of numbers (1-6): 1
DEVICE:     Right Margin: 80//  <select a printer to print report to or press
return to print to your screen>
```

```
*** CONFIDENTIAL DATA ***
BLRA LAB AUDIT REPORT BY MENU OPTION: LRRS
                                     MAY 16,2002  14:58    PAGE 1
DATE/TIME STAMP    USER            MENU OPTION   PATIENT        ACCESSION
------------------------------------------------------------------------

      MENU OPTION: LRRS
5/16/2002@14:45:2  MITRETEK,PROG   IR BY LOC     HALLAR,BROOKL  UA 0510 1
5/16/2002@14:45:2  MITRETEK,PROG   IR BY LOC     KAALAR,JERICO  HE 0516 3
5/16/2002@14:45:2  MITRETEK,PROG   IR BY LOC     KAALAR,JERICO  HE 0516 2
5/16/2002@14:45:2  MITRETEK,PROG   IR BY LOC     WEBNOM,CLIFTO  HE 0516 4

Press return to continue, '^' to Quit
```

*Figure 6-4: Audit Report by Menu Option*

## 6.3    Archive Audit Data

When running the Archive audit data [BLRA LAB AUDIT ARCHIVE] option, data will be automatically purged when the archive file has successfully been created. The BLRA LAB AUDIT ARCHIVE option is recommended for scheduling through TaskMan.

If the site would like the audit and archive functionality to track user access of lab data, the Lab ESIG audit and archive functions must be turned on at the site. The following steps must be used to turn on and utilize the audit and archive functionality of the Lab ESIG software:

1. Set Lab Parameters using the option "Enter/Edit Lab Parameters"
2. Select the LAB ESIG parameters to edit
3. Turn-on auditing
4. Select number of days to keep audit data in the system
5. Enter the location (directory pathname) to store archives of the audit data
6. After entering all parameters, schedule the BLRA LAB AUDIT ARCHIVE option in TaskMan

> **Note**: It is recommended that the scheduling of the archive of audit data have a frequency of at least once a week, if not more frequently. Depending on your site and user activity in the Lab package it may be necessary to run this option at least once a day.

7. Once the auditing and archive functions are set in motion, the BLRA LAB AUDIT RPT option can be used by designated personnel with the BLRAZLAB security key to run audit reports and view the user activity and access in the Lab package.

The option BLRA PARAMETERS ENTER/EDIT must be used to setup the archive parameters before the option BLRA LAB AUDIT ARCHIVE can be scheduled to run in TaskMan.

```
Select OPTION NAME: BLRA PARAMETERS ENTER/EDIT        Lab Parameters
Enter/Edit
Lab Parameters Enter/Edit

Select BLRA LAB PARAMETERS LAB FILE: ?
 Answer with BLRA LAB PARAMETERS LAB FILE:
   LAB ESIG AUDIT

     You may enter a new BLRA LAB PARAMETERS, if you wish
     Answer must be 1-20 characters in length.
Select BLRA LAB PARAMETERS LAB FILE: LAB ESIG AUDIT

THE CURRENT LAB ESIG PARAMETERS ARE:
LAB FILE: LAB ESIG AUDIT                  AUDIT ON?: OFF
  NUMBER OF DAYS TO KEEP:1          FILE DIRECTORY:
  ARCHIVE LAST RUN:

Would you like to edit these parameters ? YES// Y <Return>
AUDIT ON?: OFF// ON

Please enter the number of days to keep the Lab ESIT Audit data.
   Select from 1 to 7 days (default is 7).
NUMBER OF DAYS TO KEEP: 1// 3

Enter a directory path to which the archiving will store the Audit data files
   * Warning! The directory must have write and delete access! *
FILE DIRECTORY: ?

Enter NT directory pathnames in the following format: C:\
FILE DIRECTORY: D:\RLOAD

    *** THE LAB ESIG AUDITING AND ARCHIVING IS TURNED ON ***
    *** PLEASE SCHEDULE THE 'BLRA LAB ARCHIVE' OPTION IN TASKMAN ***
```

The archived data will be a flat text file and will be in the following format:

```
ACCESSION#^DATE/TIME STAMP^MENU OPTION^PATIENT^USER
MI 99 1^6/8/2001@15:12:25^IR BY LOC^SMITH,ANITA ANN^RPMS,III^
CH 0413 22^6/8/2001@15:12:57^IR BY LOC^SMITH,ANN^RPMS,III^
HE 0413 17^6/8/2001@15:12:59^IR BY LOC^SMITH,ANN^RPMS,III^
MI 98 58^6/8/2001@15:13:01^IR BY LOC^SMITH,ANN^RPMS,III^
HE 0331 6^6/8/2001@15:13:19^IR BY LOC^SMITH,ANN^RPMS,III^
MI 98 55^6/8/2001@15:13:20^IR BY LOC^SMITH,ANN^RPMS,III^
CH 0416 12^6/8/2001@15:12:23^IR BY LOC^SMITH,ANN^RPMS,III^
```

This format can easily be imported into excel, delimited by the "^" for reading and analysis.

# 7.0  Contact Information

If you have any questions or comments regarding this distribution, please contact the ITSC Help Desk by:

**Phone**:     (505) 248-4371 or

               (888) 830-7280

**Fax**:       (505) 248-4199

**Web**:       http://www.rpms.ihs.gov/TechSupp.asp

**Email**:     RPMSHelp@mail.ihs.gov